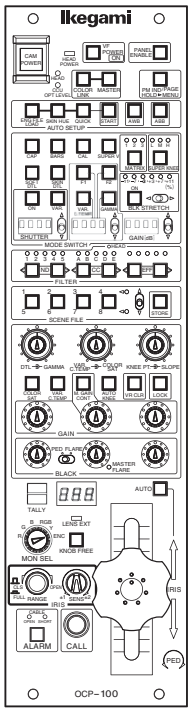
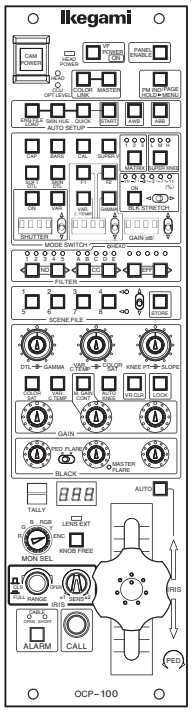


OCP-100

OPERATION CONTROL PANEL

OPERATION MANUAL

Ikegami



OCP-100

OPERATION CONTROL PANEL

OPERATION MANUAL

Ikegami

1209 1nd Edition (U) (E)

English

Instructions for Disposal of Electric and Electronic Equipment in Private Household

Disposal of used Electric and Electronic Equipment
(Applicable in the European Union and other European countries with separate collection systems)

This symbol on the product, or in the related documents in the package, indicates that this product shall not be treated as normal household waste. Instead, it should be taken to a proper applicable collection point or depot for the recycling of electric and electronic equipment.

By ensuring this product is disposed of correctly, you will help prevent possible negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product. The recycling of materials will help to conserve natural resources.
For more detailed information about recycling of this product, please contact your local city authority, your household waste disposal service or the place where you purchased the product.

Deutsch

Vorschriften für die Entsorgung von elektrischen und elektronischen Geräten in Privathaushalten

Entsorgung von gebrauchten elektrischen und elektronischen Geräten
(In der Europäischen Union und anderen europäischen Ländern mit separaten Sammelsystemen anwendbar.)

Das auf dem Produkt angebrachte Symbol, bzw. die Symbole in den in der Packung beiliegenden Dokumenten, weisen darauf hin, dass dieses Produkt nicht als normaler Haushaltsmüll behandelt werden darf. Es muss deshalb an einer dafür vorgesehenen Sammelstelle abgeliefert werden, in der das Recycling von elektrischen und elektronischen Geräten durchgeführt wird.

Durch die ordnungsgemäße Entsorgung dieses Produkts tragen Sie dazu bei, dass unsere Umwelt und unsere Gesundheit nicht durch unsachgemäße Entsorgung negativ beeinflusst wird. Mit dem Recycling von Materialien tragen wir zur Bewahrung der natürlichen Ressourcen bei.
Für nähere Informationen hinsichtlich des Recyclings für dieses Produkt sprechen Sie bitte mit Ihrer zuständigen Behörde, Ihrer Hausmüll-Entsorgungsstelle oder dem Geschäft, wo Sie das Produkt gekauft haben.

Français

Consignes de mise au rebut des appareils électriques et électroniques dans les foyers privés

Mise au rebut des appareils électriques et électroniques
(Applicable dans l'Union Européenne et autres pays d'Europe ayant un système de récupération séparé)

Ce symbole apposé sur le produit ou dans les documents liés se trouvant dans l'emballage indique que ce produit ne doit pas être traité comme un déchet ménager normal. Il doit être porté à un point de récupération correct ou à un dépôt pour le recyclage des appareils électriques et électroniques.

En vous assurant que ce produit est correctement mis au rebut, vous aiderez à empêcher les conséquences possibles pouvant affecter l'environnement et la santé humaine, pouvant être causées par une mauvaise manipulation des déchets de ce produit. Le recyclage des matériaux favorise la conservation des ressources naturelles.
Pour des informations plus détaillées concernant le recyclage de ce produit, veuillez contacter les autorités locales, votre service de mise au rebut des déchets ménagers ou le lieu d'achat de votre produit.

Español

Instrucciones para eliminar equipos eléctricos y electrónicos de una casa privada

Eliminación de equipos eléctricos y electrónicos usados
(Normas aplicables en la Unión Europea y en otros países europeos con diferentes sistemas de recogida)

Este símbolo en el producto, o en los documentos relacionados, indica que este producto no deberá ser tratado como un residuo doméstico normal. En cambio, deberá ser llevado a un punto o lugar donde los equipos eléctricos y electrónicos sean recogidos para ser reciclados.

Asegurándose de que este producto sea eliminado correctamente, usted ayudará a impedir las posibles consecuencias negativas sobre el medio ambiente y la salud humana que podrían ser causadas por el manejo inapropiado de este producto como residuo doméstico. El reciclado de los materiales ayudará a conservar los recursos naturales.
Para conocer una información más detallada acerca del reciclado de este producto, póngase en contacto con las autoridades de su localidad, con su servicio de recogida de residuos domésticos o con el comercio donde adquirió el producto.

SAFETY PRECAUTIONS

The safety precautions for using this product are described below. Please read them thoroughly before use.

1. Safety Alert Symbols

This manual employs the following “Safety Alert Symbols” to call attention to hazards:

⚠WARNING : Indicates that mishandling of the product may lead to a danger resulting in a serious injury or death.

⚠CAUTION : Indicates that mishandling of the product may lead to a danger resulting in an injury or property damage.

2. Handling Precautions

This product is designed with safety in mind; however, any electrical equipment may cause electric shock or equipment damage if used in an inappropriate manner or under unsuitable conditions.
Therefore, please follow the following instructions when handling this product:

(1) Do not remove the covers or disassemble unless absolutely necessary, to prevent malfunction or electric shock.
(2) Do not drop or expose the equipment to a strong vibration or shock.
A strong vibration or shock may cause equipment damage or failure.
(3) Be sure to turn OFF the power switch before removing modules.
(4) Avoid using or storing in the following conditions. It may cause damage to the product.
- Extremely high/low temperature
- High humidity or dusty
- Exposed to water or other liquid
- Strong vibration or shock
- Strong magnetic field or radio waves
- lightning
- In rain or snow without the cover

(5) When carrying or storing the product, always use a carrying case.
(6) Be sure to hold the plug and pull when disconnecting the cable. Failure to do so may cause a fire or electric shock due to a broken cable.
(7) Do not drop or insert metal objects such as clips or foreign objects into the equipment.
(8) Do not spread or spill water or other liquid on the equipment.
(9) Regarding the lithium battery
- Do not use an unspecified battery.
- Wrong usage of batteries may cause liquid leak, explosion, and heat, and at worst injury or fire. When replacing or discarding a battery, please contact Ikegami's sales and service centers.

3. Regular Maintenance Recommended

This product includes parts that wear out and have a limited life even in proper use or storage. Therefore, regular maintenance (once every 3 years or 8000 hours use) is recommended to extend the life and safe use of this product for a long time.
Please contact Ikegami's sales and service centers or Techno Ikegami Co., Ltd. for the regular maintenance and repair of our products.

HOW TO USE OPERATION MANUAL

The OCP-100 OPERATION CONTROL PANEL OPERATION MANUAL is intended to describe how to operate the OCP-100.

This manual is written for readers with a basic knowledge of handling broadcast cameras and Base Station (BS), so technical terms are not explained here.

This manual consists of five chapters. Related topics are included in the same chapter as much as possible so that you do not have to turn pages back and forth.

Each chapter is arranged in the order of actual operating procedures. By reading it in sequence, you can smoothly perform a series of steps, from installation and connection to operation in a proper manner.

[Structure of Operation Manual]

1. NAME and FUNCTION	: Explains the name and function of each switch and control on the OCP-100.
2. INSTALLATION and CONNECTION	: Explains how to connect the OCP-100 to the camera or BS. Also explains the specifications of connector pins.
3. OPERATION	: Explains how to turn on power, how to check operation, and how to activate various functions.
4. TROUBLESHOOTING	: Explains self-diagnosis function.
5. SPECIFICATIONS	: Lists the specifications and external dimensions of the OCP-100.

[Symbols]

The symbols used in this manual are as follows:

Note:	Supplementary information on the matter just discussed
Reference:	Sections or pages where related information is available

OCP-100

OPERATION CONTROL PANEL

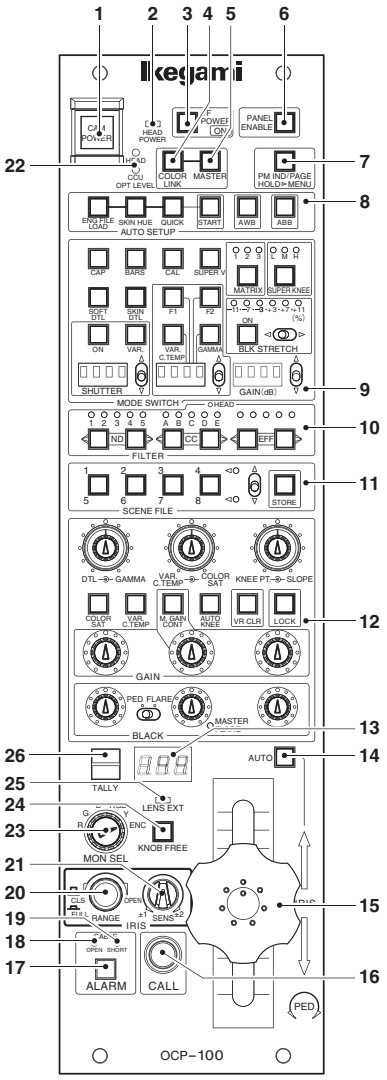
OPERATION MANUAL

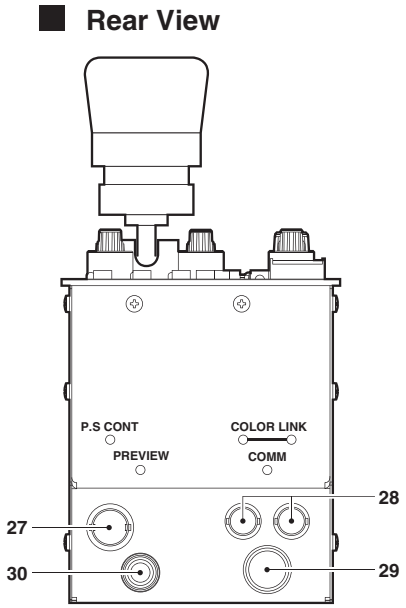
1. NAME and FUNCTION

The diagrams below show the locations of switches and connectors.

Note:

The switches and VR controls on the OCP do not work if the connected camera does not have corresponding functions. Refer to the manual for the connected camera for available functions.





1	CAM POWER switch	16	CALL switch
2	HEAD POWER indicator	17	ALARM indicator
3	VF POWER switch	18	CABLE OPEN indicator
4	COLOR LINK switch	19	CABEL SHORT indicator
5	MASTER switch	20	IRIS RANGE control
6	PANEL ENABLE switch	21	IRIS SENS control
7	PM IND/PAGE switch	22	OPT LEVEL indicators
8	AUTO SETUP switches	23	MONITOR SELECT switch
9	MODE switches	24	KNOB FREE switch
10	FILTER switches	25	LENS EXT indicator
11	SCENE FILE switches	26	TALLY indicators
12	MODE switches/VR controls	27	PS CONT connector
13	IRIS indicator	28	COLOR LINK connectors
14	AUTO IRIS switch	29	COMMAND connector
15	JOYSTICK (IRIS, M-PED) (PREVIEW switch)	30	PREVIEW connector

1 CAM POWER switch

When used with a BS/CCU which does not support the Power Cont cable, the Camera Head power output can be turned ON/OFF.

Note:

When BS/CCU compatible with POWER CONT is connected, the MAIN POWER can be remotely controlled if the POWER REMOVE/LOCAL switch of BS/CCU is set to REMOTE.

2 HEAD POWER indicator

Lights when the HEAD POWER is ON. Flashes when the camera cable is faulty (OPEN, SHORT).

3 VF POWER switch

Turns ON/OFF the power supply of the VF. When turning OFF the power supply of the VF, press the switch continuously for two seconds.

Note:

This switch is valid only if the camera head has the VF power ON/OFF function.

4 COLOR LINK switch

When pressed, the camera is changed from the master camera to the slave camera to receive color link information. (Refer to the MASTER switch.)

Reference:

Refer to " 3.4.1 Correcting Color Temperature for Multiple Cameras (Color Link)" for details.

5 MASTER switch

When pressed with the COLOR LINK switch ON, the camera is changed to the master camera to transfer color link information to other cameras. (Refer to the COLOR LINK switch.)

Reference:

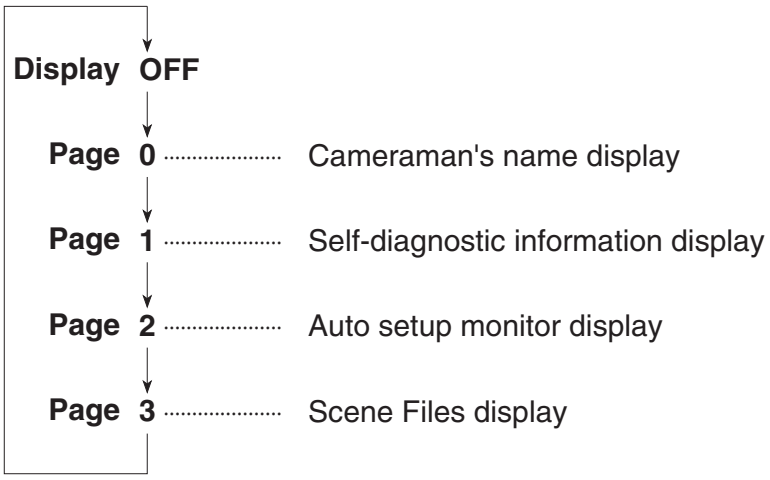
Refer to " 3.4.1 Correcting Color Temperature for Multiple Cameras (Color Link)" for details.

6 PANEL ENABLE switch

Enables operations of the OCP.

7 PM IND/PAGE switch

Displays various information in character format to the PM output of the BS. The information is displayed as shown below each time the switch is pressed.



When the PM IND/PAGE switch is held for more than 1 second, the mode is changed to menu remote mode, and the menu of the camera or BS can be controlled from the OCP. Refer to "3.5 Menu Remote" for details.

8 AUTO SETUP switches

- SKIN HUE switch, QUICK switch, START switch

When the START switch is pressed after pressing the SKIN HUE or QUICK switch, the respective auto setup process will be executed. Pressing the switch again while executing auto setup will cancel the execution. When the execution ends, the lamp goes OFF. When the execution fails, the START switch flashes. After confirming the failure, press the START switch again to clear the failure.

- AWB switch, ABB switch

Used to execute the AWB (auto white balance) or ABB (auto black balance). When the execution ends, the lamp goes OFF. When the execution fails, the lamp flashes. After confirming the failure, press the flashing switch again to clear the failure.

- ENG FILE LOAD switch

Press the ENG FILE LOAD switch first, and then press the START switch. The Engineer File 1 is loaded at the HEAD side, and then the unit is restarted.

9 MODE switches

- CAP switch

Used to set the filter to the CAP position. Or close the Iris on camera models which do not have a Cap filter.

- BARS switch

Used to set the output signal to the color bar signal.

- CAL switch

Inputs the 100% level CAL signal in the camera head. When the CAL PULSE switch is turned ON by MCP, the lamp of the CAL switch flashes.

- SOFT DTL switch

When set to ON, the edge signal is input to the level limiter circuit to control the maximum edging of subjects with large contrast ratio.

- SKIN DTL switch

When set to ON, the DTL in the skin color of the image is reduced to the optimum level. This does not affect the DTL in other colors.

- MATRIX switch

Used to select one of the three preset MATRIX settings (1, 2, or 3) or OFF. The LED above the switch indicates the current preset setting. When it is set to OFF, the switch lamp goes off. Each time the switch is pressed, 1, 2, 3, or OFF is selected in that order repeatedly. Normally, set to “1”. The three preset values are previously set by the MCP.

- SUPER KNEE switch

Used to set SUPER KNEE to ON. One of the three SUPER KNEE levels (L, M, or H) can be selected. “H” produces the largest effect, “M” the next, and “L” the smallest effect. The LED above the switch indicates the current setting. When it is set to OFF, the switch lamp goes off. Each time the switch is pressed, L, M, H, or OFF is selected in that order repeatedly. Normally, set to “M”.

- F KEY switch, VAR C.Temp switch, GAMMA switch

When one of the F1, the F2, the VAR C.Temp or the GAMMA switch is set to “ON”, the status of the item concerned will appear on the Display at the center. The function setting value can be changed by using the UP/DOWN switch. When the F1 and the F2 switches are set to “ON”, the name of the function that has been registered will be displayed for about 1 second, and then the status value will be displayed.

- BLK STRETCH switch

Used to select the black stretch/press settings. Press the “ON” switch and then the UP/DOWN switch. Any of the following positions can be selected:

Black stretch : +3, +5, +7, +9, +11

Black press : -11, -9, -7, -5, -3

The LED indicates the current setting. When LEDs for ±11 and ±7 light simultaneously, it indicates ±9. Similarly, when LEDs for ±7 and ±3 light simultaneously, it indicates ±5.

- SHUTTER switches

When the SHUTTER ON/OFF switch is pressed, the lamp lights and the preset shutter mode is set and the electronic shutter starts working. When the switch is pressed again, the lamp goes off and the electronic shutter also stops operating. While the electronic shutter is operating, the shutter speed will be displayed on the LED display. Select the shutter speed using the UP/DOWN switches.

DOWN ▼ ◄——————————► ▲ UP						
LED Display	**100**	**120**	**250**	**500**	**1000**	**2000**
Shutter Speed	1/100 sec	1/120 sec	1/250 sec	1/500 sec	1/1000 sec	1/2000 sec

Pressing the VARIABLE SHUTTER switch sets the variable shutter mode. The VARIABLE indicator lights up and the shutter speed is displayed on the LED display. The shutter speed can be selected using the UP/DOWN switches.

- GAIN switch

Select Master Gain using the UP/DOWN switch. One of the following values can be selected: -3, 0, +3, +6, +9, +12, +18, +24, +20, +36, +42, or +48dB. The LED display indicates the current Gain setting value. Normally, set to “0”.

Note:

The range of configurable gains varies, depending on the type of the connected camera.

10 FILTER switches

Use the switches to select a position of each filter. When the HEAD indicator is on, it indicates that the camera head is has control, and control from the OCP is disabled. If the switch is pressed in this mode, the switch lamp starts flashing. Pressing both flashing switches simultaneously shifts control from the camera head to the OCP. To shift control from the OCP to the camera head, also press both switches simultaneously.

11 SCENE FILE switches

Sets and reads scene files 1 to 8. Files No. 1 to No. 4 and No. 5 to No. 8 can be switched by the toggle switch on the left of the STORE switch.

Set : Press the STORE switch, and then press the file number (1 to 8) to be set.

Read : Press the file number to be read.

12 MODE switches/VR controls

- DTL/GAMMA controls

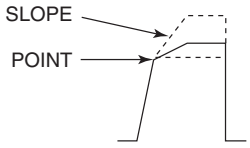
Used to control the DTL and GAMMA levels.

- VAR C. TEMP/COLOR SAT controls

Used to control the VAR. C. TEMP and COLOR SAT levels.

- KNEE POINT/SLOPE controls

Used to control the KNEE SLOPE and POINT manually.



- COLOR SAT switch

Used to turn ON/OFF the color saturation control.

- M. GAIN CONT switch

This is a switch for setting the Analog G GAIN control to master gain or to G gain. By setting the switch to “ON”, the master gain is selected, or by setting it to “OFF”, the G gain is selected.

- AUTO KNEE switch

Used to set the AUTO KNEE mode.

- VR CLR switch

This clears setting values of all items and resets them to the reference value. Clearing is carried out by a long press of the VR CLR switch.

- Item to clear “R/G/B/M FLARE” “R/G/B/M PED” “R/B/TOTAL GAIN”
“KNEE POINT/TOTAL” “AUTO KNEE POINT/TOTAL”
“MASTER GAMMA” “COLOR SAT” “VAR CTEMP”

When R/B GAIN is cleared, the existing VAR C. TEMP ON/OFF setting is also cleared.

- LOCK switch

Use to lock each control (DTL/SKIN, C.SAT/GAMMA, KNEE PT/SLOPE, R GAIN, G GAIN, B GAIN, R BLACK, G BLACK and B BLACK) in the VR control area. When the LOCK switch lamp is on, you cannot operate these controls.

- R/G/B/M GAIN control

Used to control the gain of R, G, and B channels. Controlling the G gain will not change the actual video signal level of G channel, but the levels of R and B channels change relatively. This is to prevent the change of camera sensitivity setting caused by the change of the G channel.

- R/G/B BLACK control

Used to control the pedestal or flare of R, G, and B channels. Use the PED FLARE switch to select between pedestal and flare. If the flare control is selected, the MASTER FLARE indicator lights when the OCP is connected to a camera which supports MASTER FLARE, indicating the MASTER FLARE control is active.

- PED FLARE switch

Used to select between pedestal and flare for the R/G/B BLACK control.

13 IRIS indicator

Displays the F value of the lens. The F value is not displayed (“---” is displayed) when F16 is exceeded to CLOSE.

14 AUTO IRIS switch

Used to set the AUTO IRIS mode.

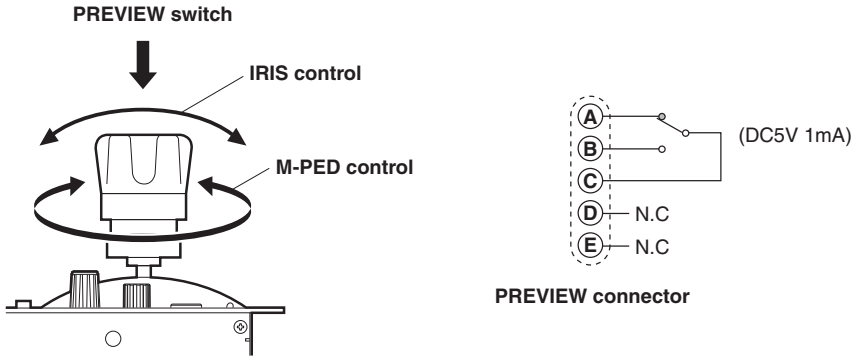
15 JOYSTICK

- IRIS control and M-PED control

Controls the IRIS of the lens and the master pedestal. In AUTO IRIS mode, the iris is controlled with ±1 stop range.

- PREVIEW switch

By pressing the top of the JOYSTICK, pins B and C of the PREVIEW connector (see item 30) will be short-circuited.



Note:

The operation of JOYSTICK is normally set to the relative value mode. It can be switched to the absolute value mode by changing the internal switch setting. Refer to " 3.6 Panel Config function" for how to switch the mode.

Relative value mode : In this mode, when the control is shifted from the MCP to the OCP, the IRIS value that is adjusted on the MCP is maintained regardless of the position of the IRIS RANGE control and JOYSTICK to prevent unintentional change of IRIS value. Operation may become one-sided depending on the position of the control and JOYSTICK. The one-sided operation can be corrected by setting the control and JOYSTICK to the center position while holding down the KNOB FREE button.

Absolute value mode : In this mode, the position of the IRIS RANGE control and JOYSTICK directly affects Open and Close of the IRIS.

16 CALL switch

Lights the R TALLY of the camera head and BS.

17 ALARM indicator

Flashes when an error is detected resulting from the self-diagnosis function. The diagnosis information is automatically displayed on the PM for about 20 seconds.

18 CABLE OPEN indicator

Lights when the triax or fiber cable between the camera head and the BS is broken or not connected. This indicator is interlocked with the CABLE OPEN indicator on the front of the BS.

19 CABLE SHORT indicator

Lights when the triax or fiber cable between the camera head and the BS is short circuited. This indicator is interlocked with the CABLE SHORT indicator on the front of the BS.

20 IRIS RANGE control

Used to set the center position of the IRIS CONTROL of the JOYSTICK (see item 15).

21 IRIS SENS control

Used to set the IRIS CONTROL range of the JOYSTICK (see item 15). The F-value between ±1 stop and ±2 stops can be set.

22 OPT LEVEL indicator

When the optical level of the Camera Head and CCU is normal, the GREEN lamp is turned on; at an attenuated level the ORANGE lamp and at an insufficient level the RED lamp is turned on.

23 MONITOR SELECT switch

Used to select the Picture Monitor (PM) or Waveform Monitor (WFM) output signals. The table below shows the output signals corresponding to each signal position.

Switch Position	R	G	B	RGB	Y	ENC
PM	R	G	B	R+G+B	Y	ENC
WFM	R	G	B	SEQ	Y	ENC

24 KNOB FREE switch

While this switch is pressed, each VR control (DTL/SKIN, C. SAT/GAMMA, KNEE PT/SLOPE, R/G/B GAIN, R/G/B BLACK) (see item 12), the IRIS, M-PED control (see item 15), and the IRIS RANGE control (see item 20) are freed, and the control data is maintained even if these controls are turned. When any of these controls become one-sided as a result of running an auto process or parallel control at the MCP, the one-sided control can be corrected by setting the control to the center position while holding down the KNOB FREE button.

25 LENS EXT indicator

Lights up when the lens extender is ON.

26 TALLY indicators

R TALLY and G TALLY indicators. The R TALLY also lights up when the CALL switch of the camera head or BS is pressed.

27 PS CONT connector

Connector for POWER REMOTE control. When connected to the BS with the POWER CONT cable, the MAIN POWER can be controlled from the OCP.

28 COLOR LINK connectors

Connect the COLOR LINK cable. Bridge-connecting multiple OCPs with the COLOR LINK cables enables color link operation.

29 COMMAND connector

Connect the CP cable.

30 PREVIEW connector

Output connector for the PREVIEW switch (see item 15).

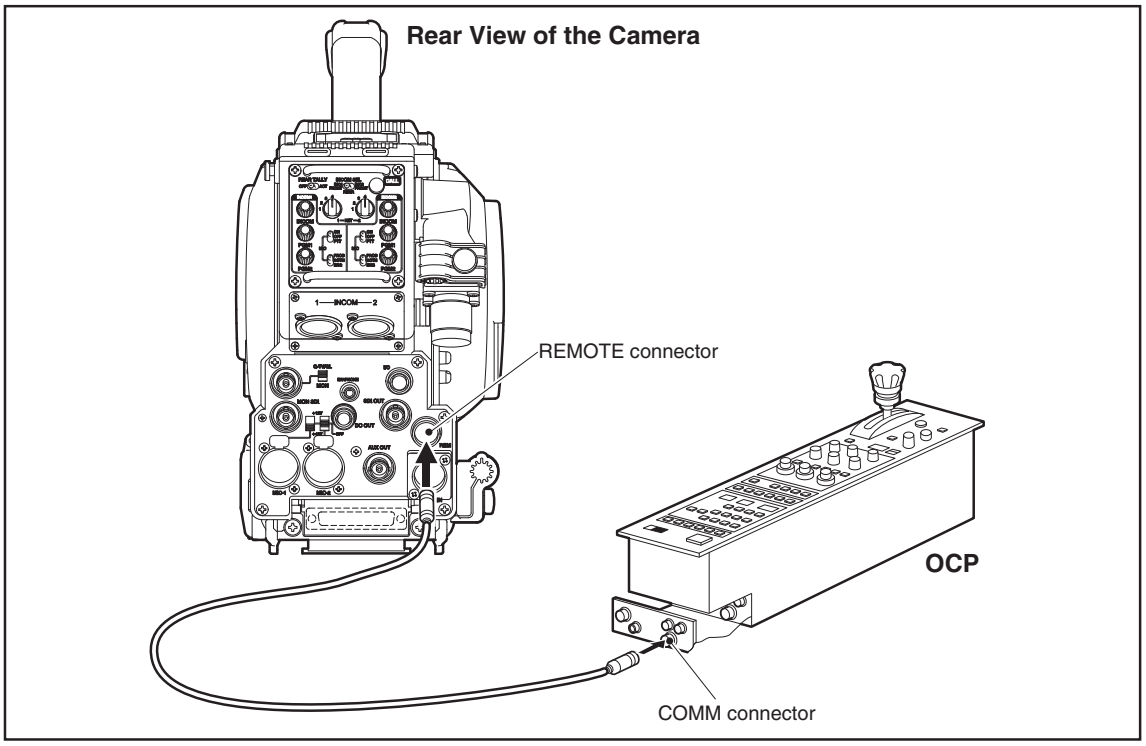
2. INSTALLATION and CONNECTION

2.1 OCP Connection

The diagrams below show the connection of the ocp.

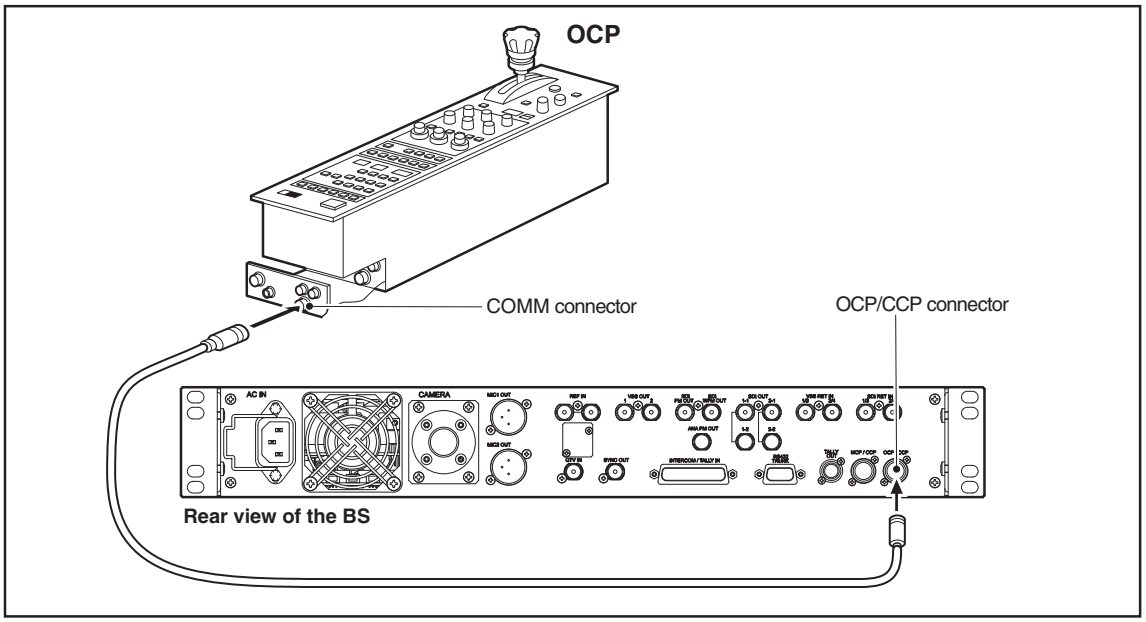
■ Connecting OCP and Camera Head (Self-Contained Operation)

Connect the COMM connector of the OCP to the REMOTE connector on the rear side of the camera head with a CP cable.



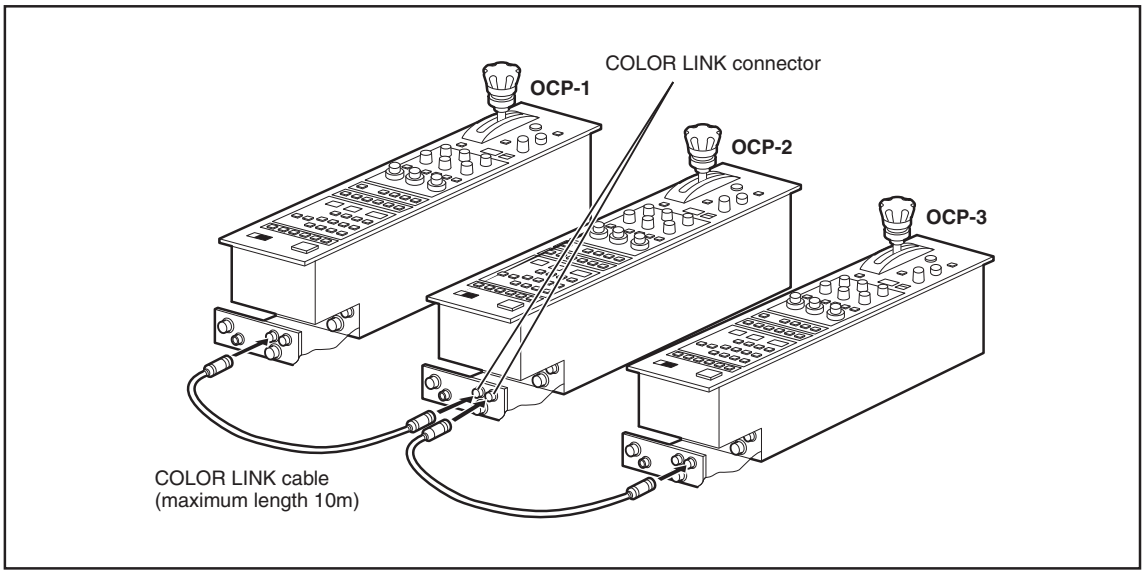
■ Connecting OCP and BS

Connect the COMM connector of the OCP to the OCP/CCP connector of the BS using a CP cable.



■ Color Link (When Operating Multi-Camera System)

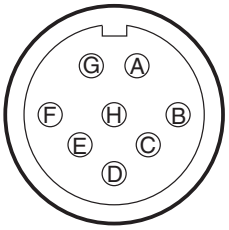
Connect the COLOR LINK connector of the OCP with the COLOR LINK cable by bridge connection. As the COLOR LINK connector IN and OUT cannot be differentiated, the connecting position is free.



2.2 Connector Pin Function

■ PS. CONT Connector

Receptacle



Insertion Side

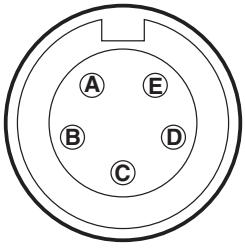
Connector for outputting the power supply ON/OFF control signals of the camera head and BS.

Main body side : R05-R8M
Cable side : R05-PB8F (8-pin female plug)

Pin No.	Name	Function	I / O	External Interface
Ⓐ	PS CONT (+)	ON/OFF control signal for BS POWER (+)	OUT	
Ⓑ	HE PWR CONT (+)	ON/OFF control signal for HEAD POWER (+)	OUT	
Ⓒ	N. C	(spare)	—	
Ⓓ	N. C	(spare)	—	
Ⓔ	N. C	(spare)	—	
Ⓕ	(HEAD ON IND)	(spare)	—	
Ⓖ	PS CONT (-)	ON/OFF control signal for BS POWER (-)	OUT	
Ⓗ	HE PWR CONT (-)	ON/OFF control signal for HEAD POWER (-)	OUT	

■ COLOR LINK Connector

Receptacle



Insertion Side

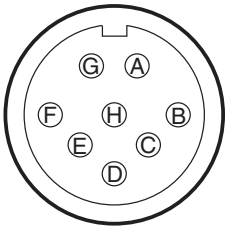
Connector for outputting the color link control signal.

Main body side : R05-R5F
Cable side : R05-PB5M (5-pin male plug)

Pin No.	Name	Function	I / O	External Interface
Ⓐ	HET TRX (+)	Color link control signal output (+)	OUT	
Ⓑ	HET TRX (-)	Color link control signal output (-)	OUT	
Ⓒ	HET GND	Ground for Color link control signal	GND	
Ⓓ	N. C	(spare)	—	
Ⓔ	N. C	(spare)	—	

■ COMMAND Connector

Receptacle



Insertion Side

Connector for inputting and outputting various control signals with the BS.

Main Body Side : PRC05 - R8M
Cable Side : PRC90 - 199P9 - 8F (8-pin female plug) or equivalent

Pin No.	Name	Function	I / O	External Interface
Ⓐ	HED RX (+)	Digital data input (+) BS -> Control Panel	IN	
Ⓑ	HED RX (-)	Digital data input (-) BS -> Control Panel	IN	
Ⓒ	HEC TX (+)	Digital data output (+) Control Panel -> BS	OUT	
Ⓓ	HEC TX (-)	Digital data output (-) Control Panel -> BS	OUT	
Ⓔ	+ 12 V	DC + 12 V power supply from BS	IN	
Ⓕ	+ 12 V RET	Ground for DC + 12 V power supply	RET	
Ⓖ	INCOM TALK	INCOM microphone signal to BS	OUT	
Ⓗ	INCOM RECEIVE	INCOM receiver signal from BS	IN	

3. OPERATION

3.1 Turning ON Power

3.1.1 Non-POWER CONT

Turn ON/OFF the power using the BS/CCU MAIN POWER switch. The CAM POWER switch on the OCP can only turn ON/OFF the HEAD POWER.

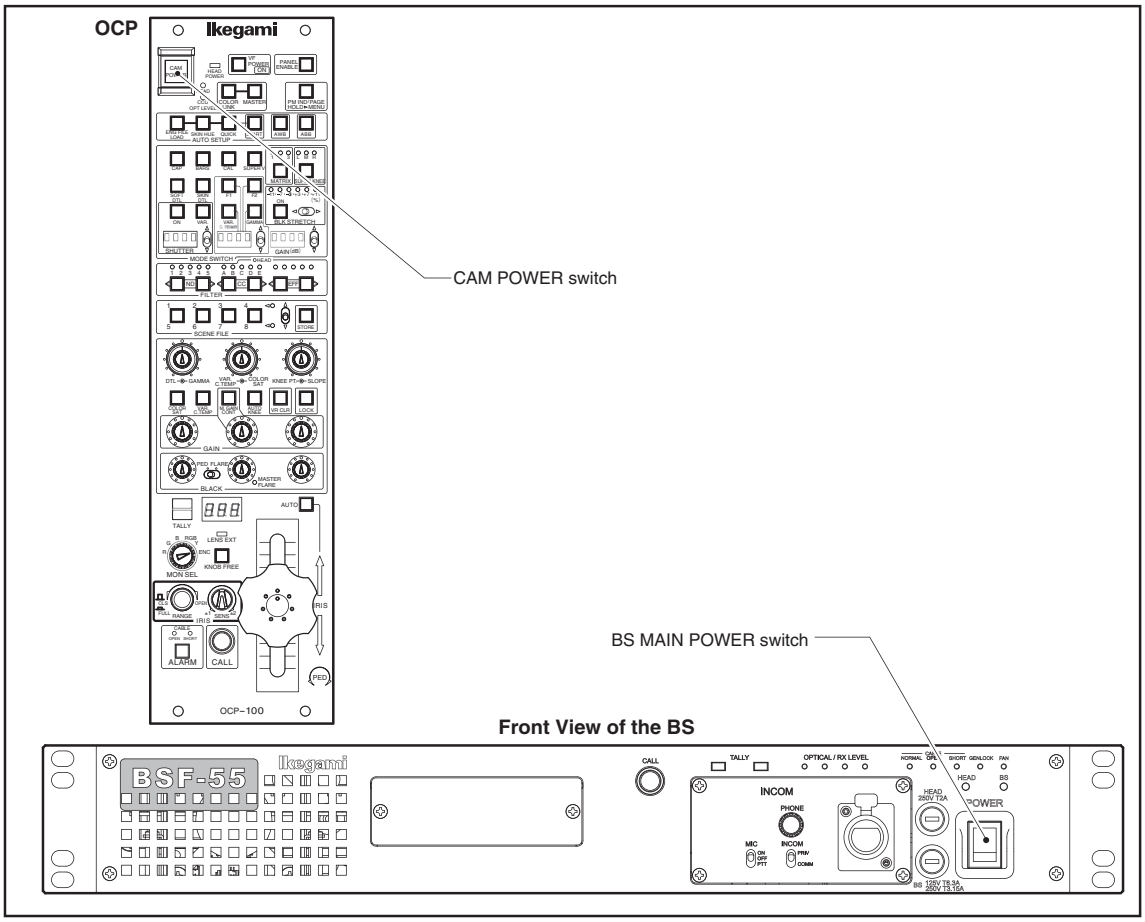
3.1.2 POWER CONT

Normally, set the switches as follows, and turn ON/OFF the power using the CAM POWER switch on the OCP.

- **Camera head (Camera adaptor)**
  HEAD POWER switch : ON

- **BS**
  BS MAIN POWER switch : | (ON)
  POWER REMOTE/LOCAL* : REMOTE

  ***Note:** Only corresponding apparatus.*



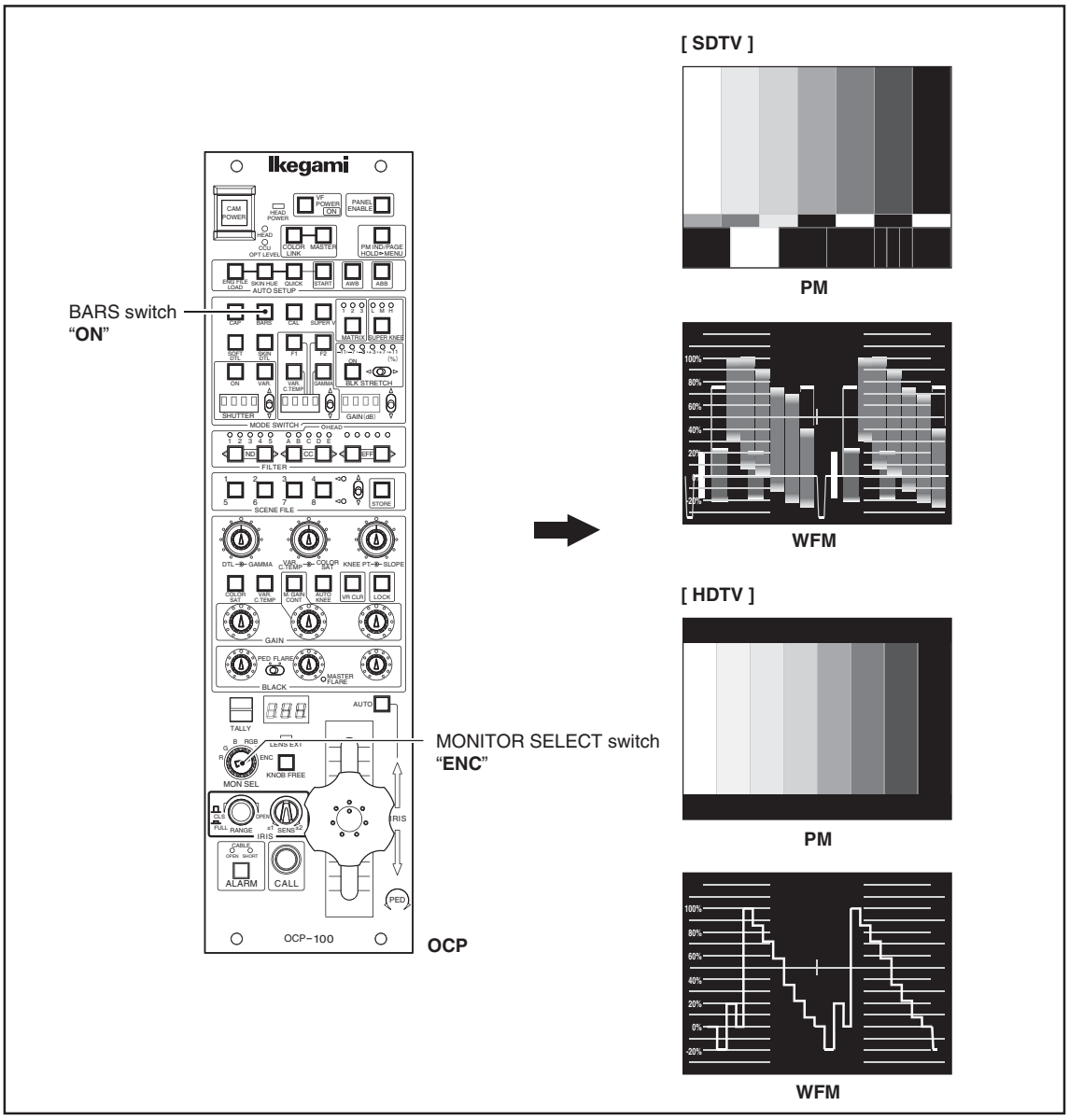
3.2 Operation Check

After turning ON the power, check that signals are output normally to the PM and WFM. If signals are not output for some reason, first check the following points before suspecting a fault.

- Are cables connected properly?
- Are switches set correctly?
- Is there a blown fuse?
- Is the power switch turned ON?

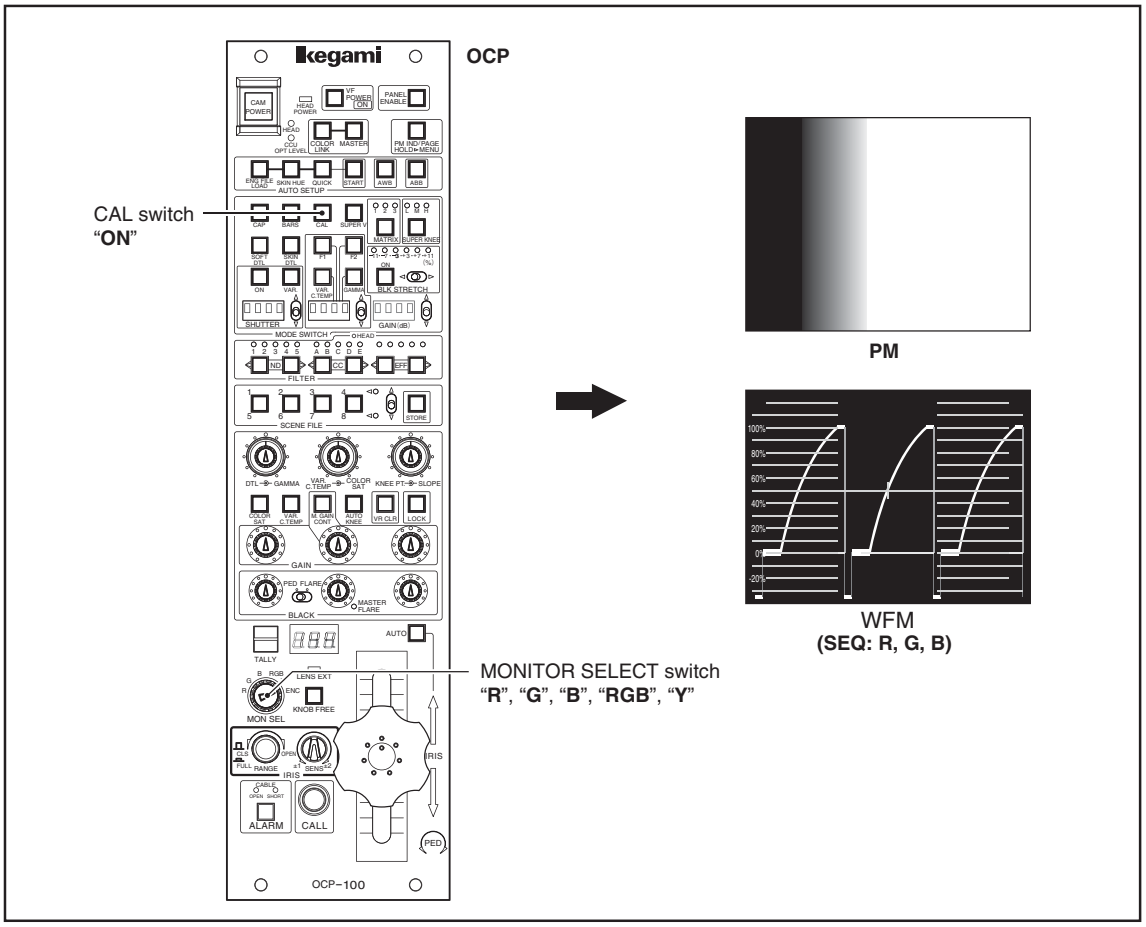
3.2.1 Checking Color Bars Signal

Turn ON the BARS switch on the OCP/MCP, and check that normal color bars signal is output.



3.2.2 Checking with CAL Pulse

Check if the level of the video system is normal. Turn ON the CAL switch on the OCP/MCP, and check that the 100% level CAL pulse is output as shown in the following figure:



3.2.3 Checking Images on Charts

Shoot an external chart and check that the image is normal.

3.3 Auto Setup

Auto setup is the function of automatically adjusting the level with the CPU inside the camera head. The following table shows the auto setup functions adjusted by different processes.

Control Item	Auto Setup Function		
	OCP		
	QUICK	AWB	ABB
REF	EXT	EXT	EXT
LEVEL			
BLK SET	R, G, B		R, G, B
PED	R, G, B		R, G, B
GAIN	R, G,B	R, B	
GAMMA	R, G, B		
FLARE	R, G, B		
WHITE CLIP	R, G, B		
AUTO KNEE			
SLOPE	R, G, B		
POINT	R, G, B		
MANU KNEE			
SLOPE	R, G, B		
POINT	R, G, B		
BLACK SHADE			
H SAW			R, G, B (See Note 3.)
H PARA			R, G, B (See Note 3.)
V SAW			R, G, B (See Note 3.)
V PARA			R, G, B (See Note 3.)

Notes:

1 Available Auto Setup process depend on camera model.

2 REF EXT is the External Reference and is set by the reference setting function.

3 Executed only when the QUICK switch is pressed as well.

4 Set the Gch to the 100% level using IRIS.

● QUICK Auto Setup

No charts are required because of the use of the built-in electrical test signals. Even if charts cannot be shot, the camera can be set up. As the quick auto setup is performed using the CAL pulse, it does not include the adjustment of circuits before the insertion of the CAL pulse.

● Auto White Balance (AWB)

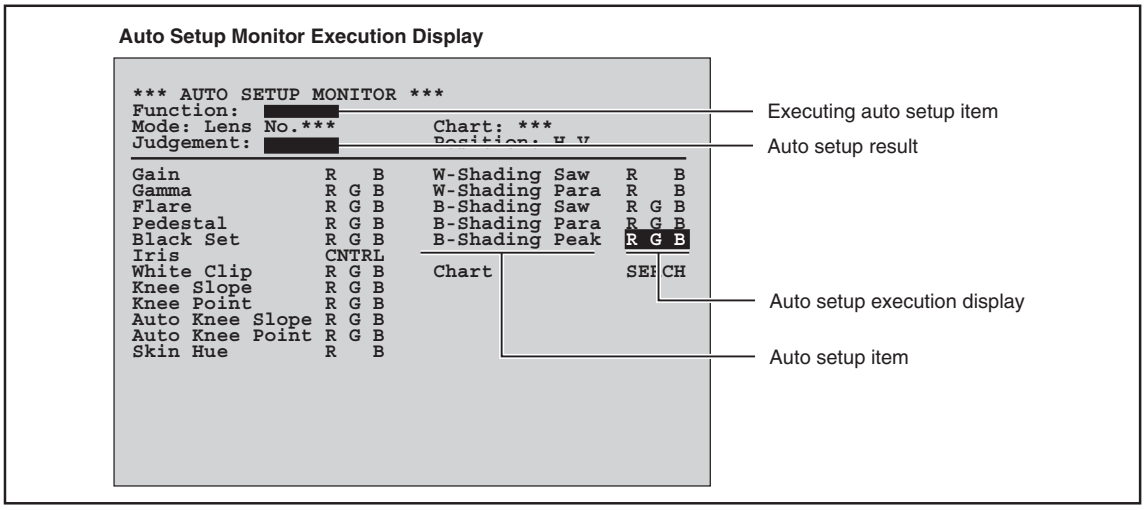
Used to adjust the white balance. Perform as required during operation.

● Auto Black Balance (ABB)

Used to adjust the R, G, B black balance. Perform as required during operation. Auto setup is converged to the reference file values. At shipment, this reference file values are created in the memory. To change the reference file values, refer to the MCP operation instruction.

● Execution State Display of Auto Setup

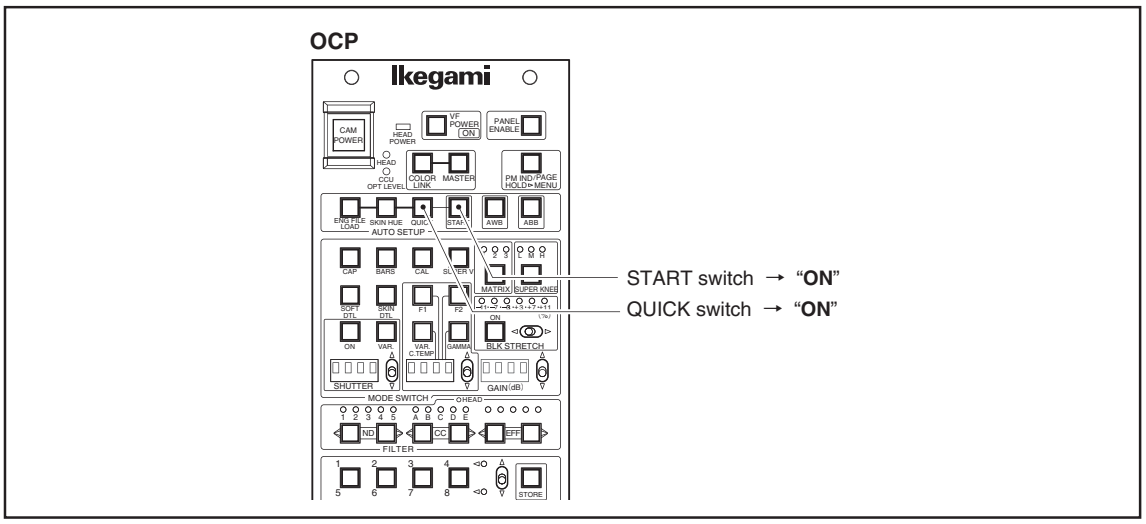
When auto setup is executed, the execution state of the auto setup is displayed on the VF and PM windows.



The item where the cursor is positioned is the item being executed.

Upon completing auto setup, “OK” will be displayed on the “Judgement” box. If it does not end normally, the cursor will remain at the item which could not be set up and “NG” will be displayed on the “Judgement” box.

3.3.1 Quick Auto Setup



1 Press the QUICK switch in the AUTO SETUP switches on the OCP.

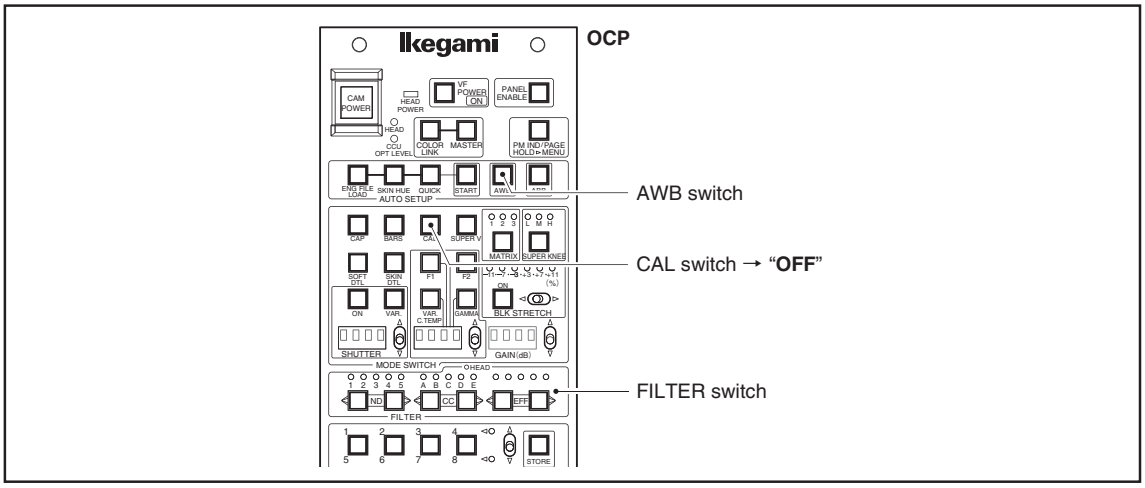
2 Press ON the START switch.

Note:

It is recommended to center the VR controls for gray scale adjustment prior to running Quick Auto Setup to avoid one sided VR control range.

DTL and Color SAT are not adjusted by the Quick Auto Setup, so VRs should be centered using the knob free function.

3.3.2 AWB (Auto White Balance)



1 Set the CAL switch to "OFF".

2 Shoot an external subject which contains white. At this time, the following conditions need to be satisfied:

- The white area covers more than 10% of the screen.
- There is no highlight of more than 100% on the screen.
- The image level of the white balance area is more than 30%.

3 Set the filter to the appropriate position according to the light source using the FILTER switches. Set the video signal level to the appropriate value using the IRIS control (the AWB from the control panel is executed at the iris value at that time).

4 Press the AWB switch to execute the auto white balance. To cancel the auto white balance, press the switch again.

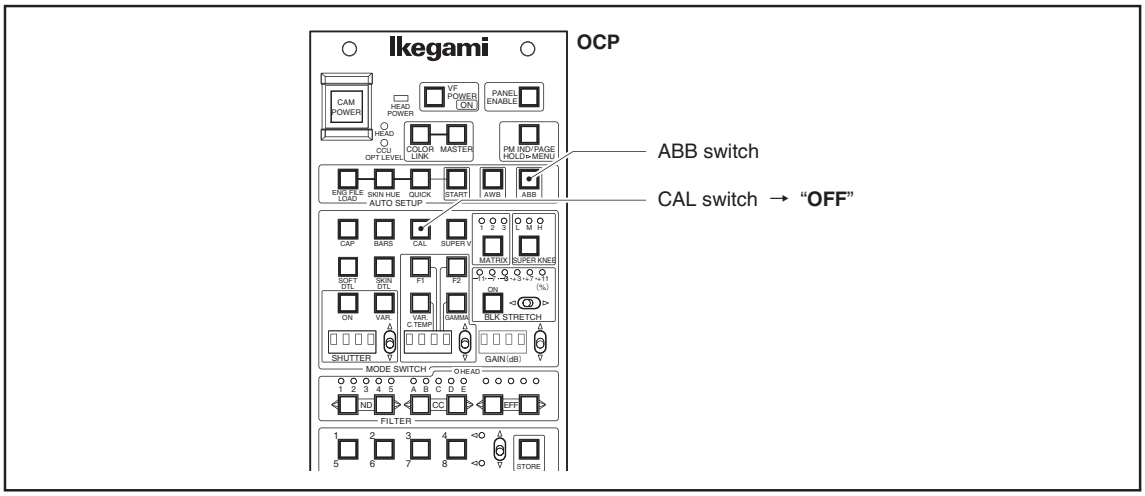
5 When auto white balance completes, the lamp goes off. If it did not complete normally, the lamp flashes. "OK" or "NG" will be displayed on the VF window. If "NG" is displayed, press the AWB switch again to clear the NG state. If "NG" is displayed, check if the external subject satisfies the above conditions and that the filter is appropriate, and repeat from step ***2***.

If the R, G, B GAIN controls on the OCP are not at their center positions, only one side of the control may be effective as a result of AWB. The one-sided control can be corrected by setting the VR back to the center position while pressing the KNOB FREE button.

Note:

Depending on the CAMERA models, the area where White Balance is adjusted will be displayed in a Zebra Pattern when "AWB OK" is selected (that is, when the automatic white balance is enabled).

3.3.3 ABB (Auto Black Balance)



1 Set the CAL switch to "OFF".

2 Press the ABB switch. The CAP state is set automatically, and auto black balance is executed. The auto black balance can be canceled by pressing the switch again.

3 When auto black balance completes, the lamp goes off. If it did not complete normally, the lamp flashes.
"OK" or "NG" will be displayed on the VF window. If "NG" is displayed, press the ABB switch again to clear the NG state. After removing the cause, repeat from step ***2***.

If the R/G/B FLARE controls and MASTER PEDESTAL control on the OCP are not at their center positions, only one side of the control may be effective as a result of ABB. The one-sided control can be corrected by setting the VR back to the center position while pressing the KNOB FREE button.

To execute ABS, press the QUICK switch and then the ABB switch. AUTO BLACK SHADING will be executed.
PED, BLACK SET and BLACK SHADING are executed for the AUTO BLACK SHADING. (PED and BLACK SET are also executed when auto black balance is executed.)

3.4 Operation Procedures

3.4.1 Correcting Color Temperature for Multiple Cameras (Color Link)

Normally, when outdoor live broadcasting is performed, the white balance must be adjusted as the color temperature changes. However, it is not easy to adjust the white balance not only for a single camera but uniformly for a number of camera.
Color Link is a function that enables control of several cameras simultaneously by connecting individual OCPs by cables for communication between the Panels.

● Color Link operation method

1 Manually reset the condition of the camera.

- CAL : “OFF”
- FILTER HEAD : “REMOTE”
- SCENE FILE : “OFF”
- CC FILTER : “EFFECT”

other items

2 Adjust the automatic white balance of individual cameras under a single light source.

3 Press the COLOR LINK switch to select the cameras on which Color Link is operated.

4 Press the MASTER switch on the Control Panel that serves as the Master.

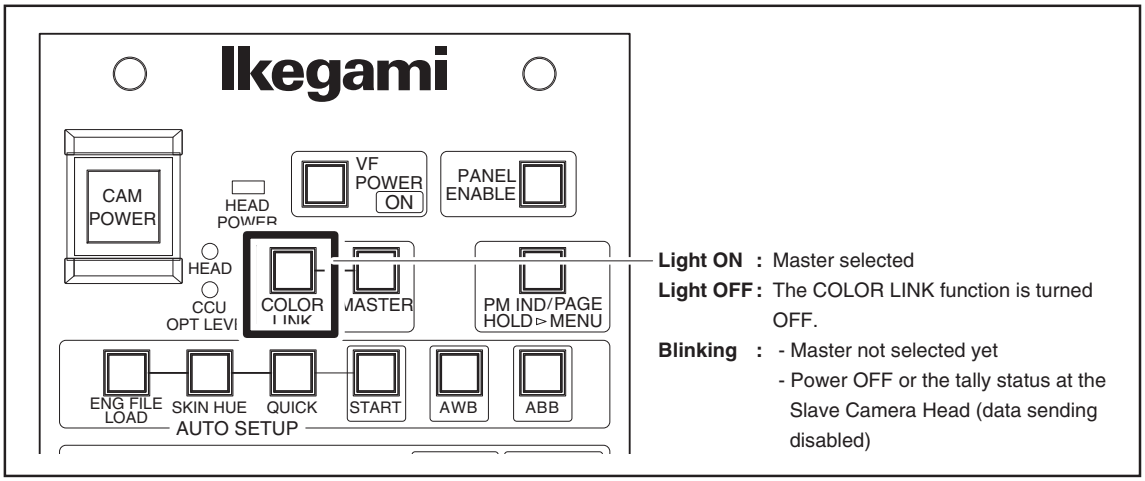
5 Adjust the controllable items.

- CC FILTER : “ON/OFF”
- VAR C.Temp : “ON/OFF”
- VAR C.Temp : “Analog”
- GAIN [R/G/B/M] : “Analog”

* “VAR C.Temp” is not effective for some versions of Camera Head.

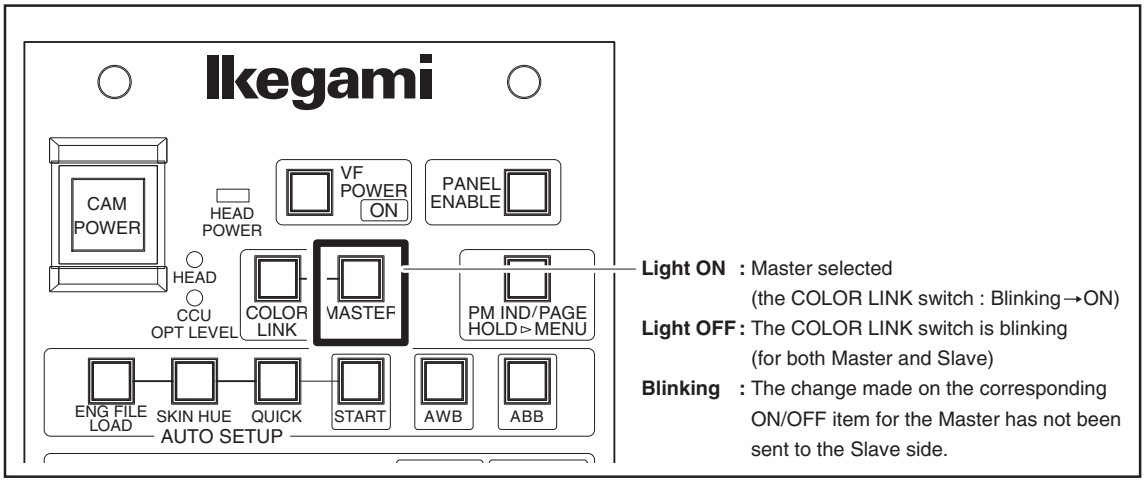
6 To terminate the COLOR LINK operation, press the MASTER, COLOR LINK switch on the Master to set it to the “OFF” status and press the COLOR LINK switch on the Slave to set it to the “OFF” status.

● Color Link switch



- At the same time when the COLOR LINK switch is turned OFF, the MASTER switch will be turned OFF.
- After the Master has been selected, no Slave can be added.
- By turning off the COLOR LINK switch of a Slave, the COLOR LINK operation of that particular Panel can be disabled.

● Master switch



- If the MASTER switch on the Slave side is pressed after the Master has been selected, an error sound will ring and the lamp will not light up.
- When the MASTER is released, all of the internal data stored in the Slave and the Master through the COLOR LINK operation will be cleared.

● Operation of the VAR.C.Temp

- Even if a camera incorporates the VAR C.Temp function, the COLOR LINK operation may not be possible in some cases, depending on the Camera Software version.
- The Master's Panel will send a request for MF to the Camera Head, and the subsequent operation will be determined, depending on the answer.

  The answer is of the color temperature : The COLOR LINK operation is disabled.
  The answer is of the control value : The COLOR LINK operation is enabled.

● Prohibition operation at the time of the use

- No operation item is for bidden on the Master side.
- The operation of the CC filter on the Slave side is forbidden.
- The ON/OFF operation of VAR C.Temp is forbidden when the camera model supports VAR C.Temp.

● Operation in Tally

- When the Master is at tally, the operation is normal.
- When the Slave is at tally, the data sent from the Master is stored as internal data but will not be sent to the Camera Head. When the tally is cleared, the stored internal data will be sent to the Camera Head.

● Communication between the panel

- When the MASTER switch at the Master side is blinking, no data transmission is performed from the Master to the Slave. When the blinking MASTER switch is pressed, then the data transmission is started.
- If there is any change in the Master's ON/OFF items, the MASTER switch on the Master side will blink.
- As for the Analog items, the Master will monitor the MF value. If there is any change, the sum total of the variation from the start of the COLOR LINK operation will be sent to the Slave.

● The transmission to a camera head (slave)

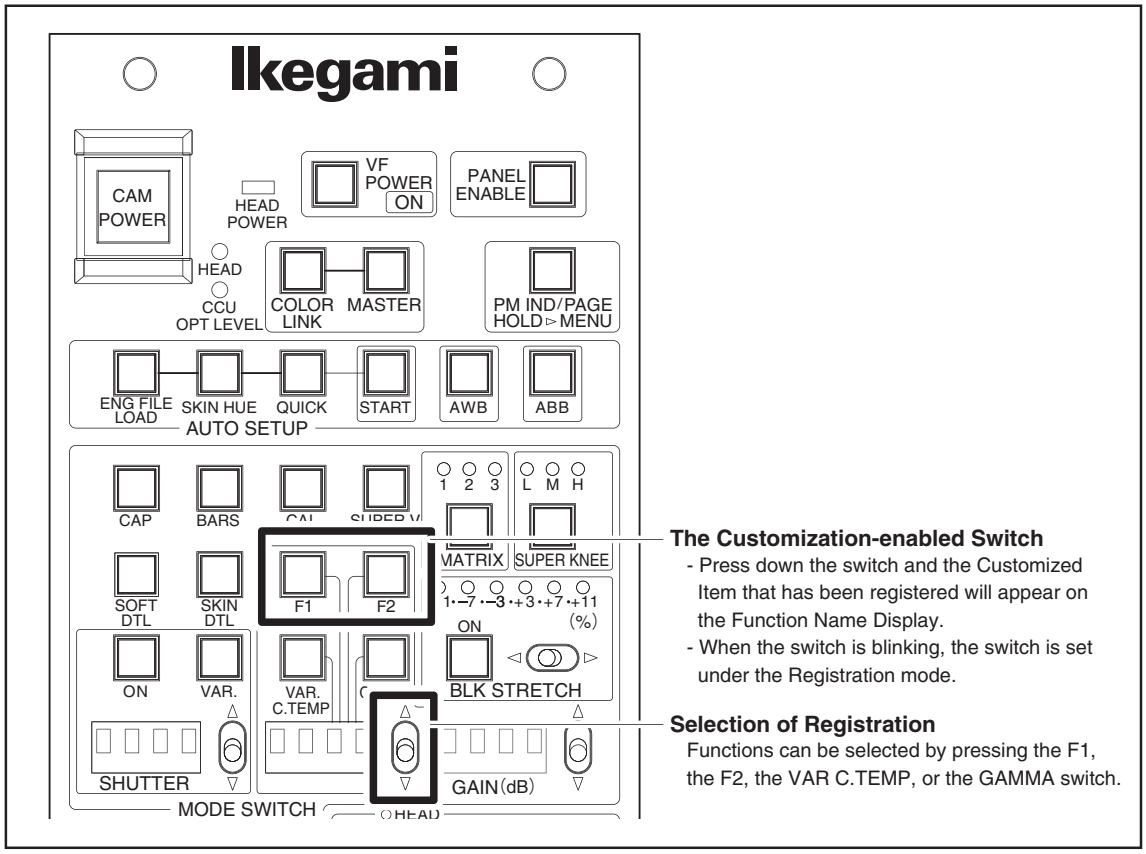
- Under the tally status, the data sent from the Master will be stored. After the tally status is cleared, the data will be sent to the Camera Head.
- On the basis of the Analog data sent from the Master, the Slave will calculate the data to be sent to the Camera Head and will send it.
- The ON/OFF items will be sent to the Camera Head without change.

- As for gain, data to be sent differs, depending on the VAR C.Temp setting.
  VAR C.Temp ON : No Gain data is sent when the setting is OFF.
  VAR C.Temp OFF : No Gain data is sent when the setting is ON.
- The Gain of VAR C.Temp is sent only when the camera model supports VAR C.Temp.

3.4.2 F KEY customized function

The F1 and the F2 switches are the only switches that can be customized.

● Registration method

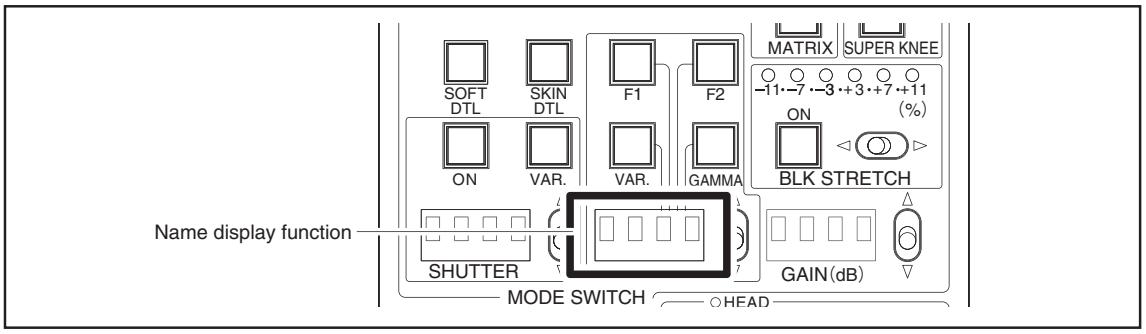


1 Press down either the F1 or the F2 switch for about 1 second. The OK sound will be generated and the F1 or the F2 switch lamp will blink.

2 The name of a function will appear on the Display at the center. By operating the UP/DOWN switch, the function indicated on the screen will be altered. When the UP/DOWN switch is operated, the displayed function will be registered.

3 To exit from the ”REGISTRATION” mode, press down the F1 or the F2 switch.

● Name display function



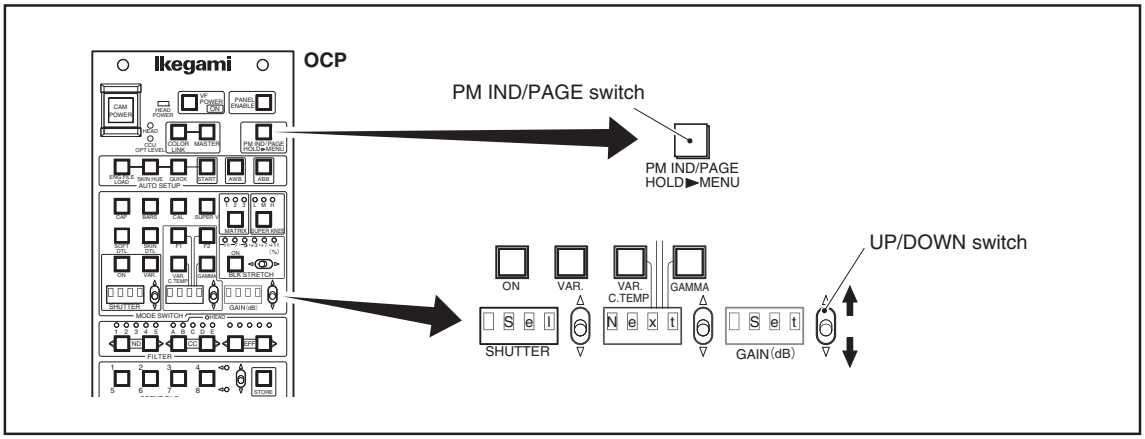
When the F1 or the F2 switch is pressed down, the name of the registered function will appear on the display. In case the name contains 4 characters or more, the displayed name will flow to the left until the last character is displayed. When the ⊙ UP/DOWN switch is pressed down again, the display will change from the Function Name indication to the Status indication.

● Functions that can be registered

Item	Classification	Display
Skin DTL Gain	Analog	SKIN DTL
Camma Mode	ON/OFF	Gamma Mode
DTL	ON/OFF	DTL
Knee	ON/OFF	KNEE
Flare	ON/OFF	Flare
Hi-Light DTL	ON/OFF	Hi-Light
Hi-Light DTL Gain	ON/OFF	Hi-Light Gain
Smooth Knee	ON/OFF	Smooth Knee
AWB ch	ON/OFF	AWB ch
ATW	ON/OFF	ATW
Digital Extender	ON/OFF	DGTL EXTENDER
AVC	ON/OFF	AVC

3.5 Menu Remote

When the OCP is connected to the camera or BS, the menu of the camera or BS can be remotely controlled from the OCP. To control the menu of the camera or BS, use the PM IND/PAGE switch and ⇕ UP/DOWN switches of SHUTTER, GAMMA, and GAIN.



1 When the PM IND/PAGE switch is held for more than 1 second, the mode is changed to menu remote mode. In the menu remote mode, the display of the SHUTTER, GAMMA, and GAIN switches changes to flashing “Sel”, “Next”, and “Set” respectively. Functions for each ⇕ UP/DOWN switch changes as shown below.

SHUTTER → Sel (select)	Switch to select UP or DOWN for the menu items.
GAMMA → Next (next)	Switch to select the next choice (displayed only when the BS is connected.).
GAIN → Set (set)	Switch to accept the selection. Accept the menu selection by pressing downward ▼.

2 Select a camera menu item using the ⇕ UP/DOWN switch of the Sel.

3 Accept the menu selection pressing the ⇕ UP/DOWN switch of the Set downward ▼. Upward ▲ direction is not used.

4 Next display is displayed only when the BS is connected.
The ⇕ UP/DOWN switch of the Next is the switch to select the next choice for entering the bar title when the BS is connected. Next switch works the same as the Sel switch for other menus.

5 Press the PM IND/PAGE switch again to cancel the menu remote mode.

Note:

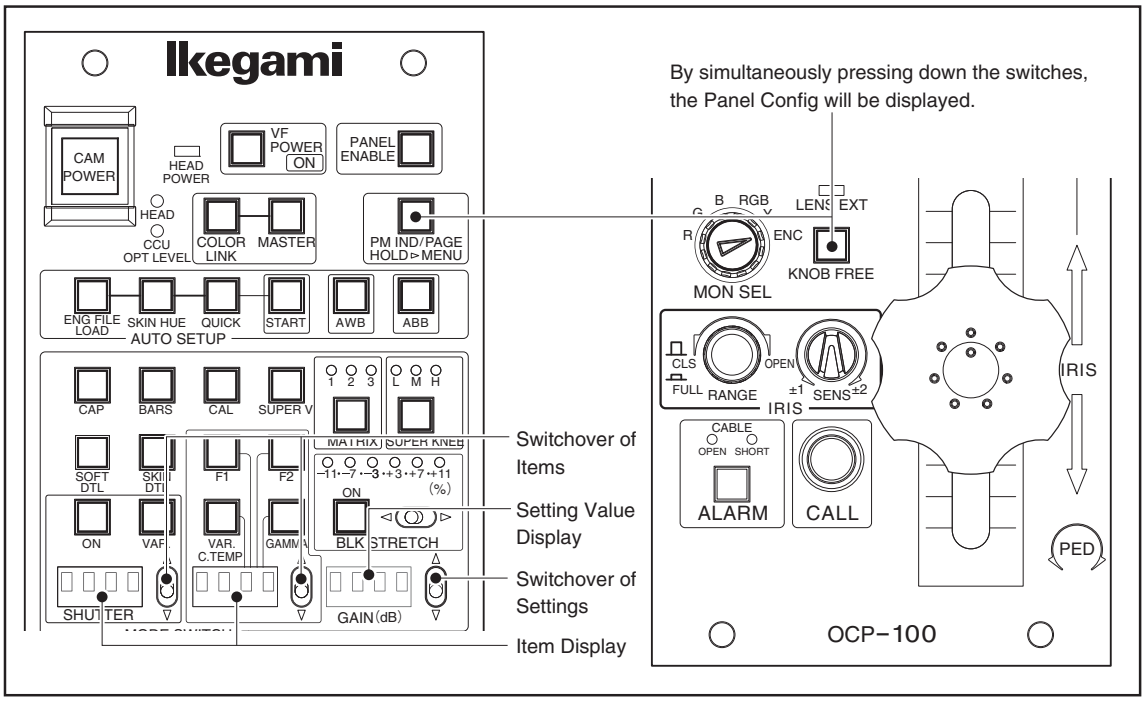
If the camera menu is displayed from the OCP when the BS is connected, the characters of the menu are output to the main video. Therefore, when operating the menu remote, be sure that the main video is not used.
To prevent the mis-operation of the menu while the main video is used, the operation of the camera menu is forcibly set to OFF when the TALLY is ON.

Note:

Depending on the BS model, some cable extension adaptor is not displayed on the menu unless the BARS switch is set to ON. Refer to the manuals for each BS model.

3.6 Panel Config function

● Setting screen display



- While the Menu is not displayed, press the PM IND switch for about 1 second while pressing the KNOB FREE switch. After 1 second has elapsed, the OK sound will be generated and the STR number will be displayed.
- By operating the UP/DOW switch located on the side of the Display, items or settings can be altered.
- By operating the left and the center UP/DWON switch, the Setting Item will be switched over.
- By operating the right UP/DOW switch, the Content of the Setting will be switched over.

● STR number of display

- When the setting screen of the Panel Config function is displayed, the STR number is displayed for about 2 seconds.
- The STR number display is carried out by using the 4-digit Display at the center.

  Ex : In the case of STR-0123V45.67.89, the number will be played in the sequence of “0123” “V45” “6789”.
- If the UP/DOWN switch for switching of Items or Settings is operated while the STR number is displayed, the STR number display will disappear and the Panel Config setting will be displayed. (At this time, no change will occur in the contents of the settings.)

● RAM Clear

- If the UP/DOWN is pressed upward while the setting of the last item on the List of Configurable Items is displayed, the display, “RAM” “CLR” “RDY”, will appear.
- “RDY” can be switched over to “EXE?” by operating the UP/DOWN switch on the right side.
- The KNOB FREE Switch Lamp will blink when “EXE?" Is displayed and will go off when “RDY” is displayed.
- If the KNOB FREE Switch Lamp is turned off, the switch is operating normally.
- If the blinking KNOB FREE switch is pressed, the display, “RAM” “CLR” “….”, will appear, causing the RAM Clearing sequence to proceed.
- When RAM clearing is completed, “COMP” “LETE” “!!!!” will be displayed, indicating that the Initialization has been completed.
- After 1 second since the completion of the Initialization, the display will be changed to “OCP” “REST” “ART !”. Then, 2 seconds later, the Panel will automatically restart.

List of Configurable items

Item	Display (L)	Display (C)	Setting	Description
IRIS Mode	IRIS	MODE	OFF *1	A relative value and an absolute value can be mutually switched over. *2
			ON	Operates only by an absolute value.
Gain Range	GAIN	RNGE	3dB *1	The range of control is ±3dB
			6dB	The range of control is ±6dB
M.Gain Range	MGAN	RNGE	3dB *1	The range of control is ±3dB
			6dB	The range of control is ±6dB
PED Range	PED	RNGE	STD *1	The range of control is standard.
			HALF	The range of control is reduced to 1/2 of the standard setting.
			QTR	The range of control is reduced to 1/4 of the standard setting.
M.PED Range	MPED	RNGE	STD *1	The range of control is standard.
			HALF	The range of control is reduced to 1/2 of the standard setting.
			QTR	The range of control is reduced to 1/4 of the standard setting.
VCT Range	VCT	RNGE	STD *1	The range of control is standard.
			HALF	The range of control is reduced to 1/2 of the standard setting.
			QTR	The range of control is reduced to 1/4 of the standard setting.
Center Flare	CTR	FLAR	AUTO	Selects automatically. *3
			G CH	G Flare control
			MAST	M.Flare control
VF Power DISP	VFPW	DISP	BLNK *1	Blinks when VF Power is OFF.
			OFF	Goes off when VF Power is OFF.
OK Buzzer	OK	BUZZ	ON *1	The OK sound is generated.
			OFF	The OK sound is not generated.
Error Buzzer	ERR	BUZZ	ON *1	The Error sound is generated.
			OFF	Error sound is not generated.
Tally Guard	TLY	GARD	OFF *1	The Tally Guard is effective.
			ON	The Tally Guard is not effective.
PAU	PAU		OFF *1	The PAU operation not effective
			ON	The PAU operation effective
Auto STD *4	AUTO	STD	ENA	Operates
			DIS	Does not operate.

*1 : Standard Setting

*2 : An absolute value at FULL ON; a relative value at FULL OFF.

*3 : Master if the Master exists, or G ch if not.

*4 : Change the items uncontrollable by OCP-100 to the controllable items by selecting the standard setting according to the operating conditions as shown on the next page (the Auto STD Items). (This operation is not effective when the parallel connection is employed.)

The contents of the standard setting are shown below when the Auto Standard function is set to ON.

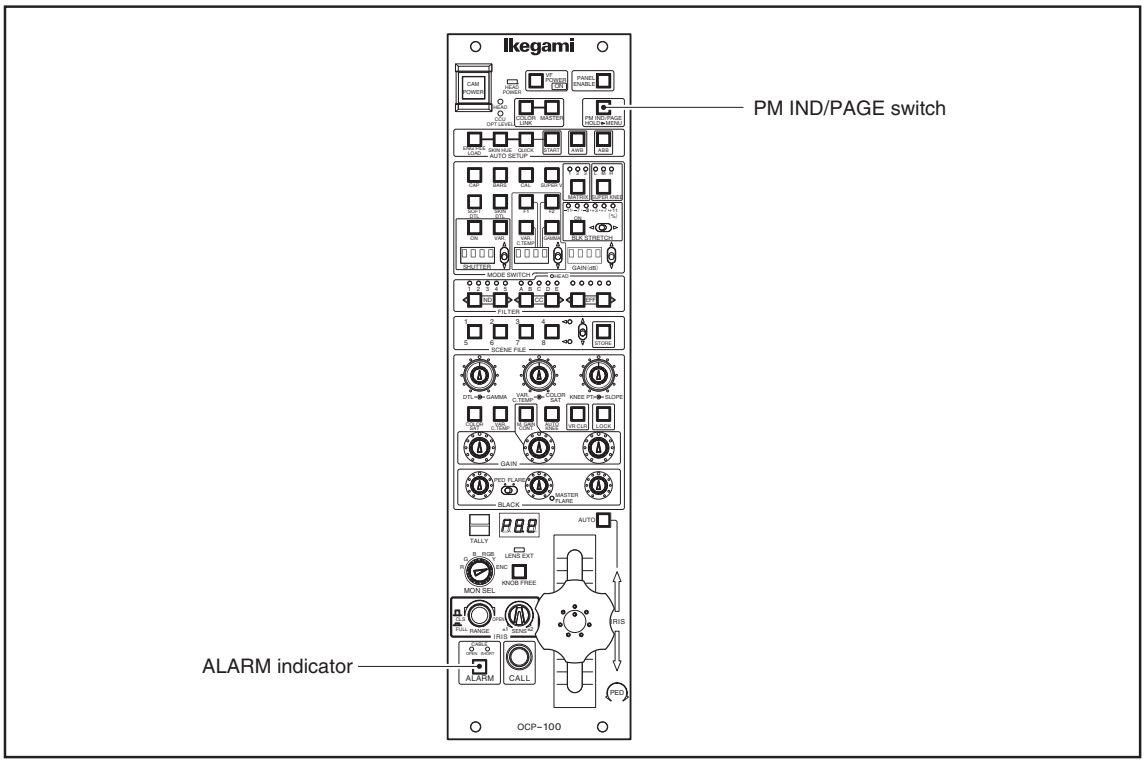
Auto STD items

Item	Normal condition	Movement condition
File Transfer Load	OFF	ON
File Transfer Load (HD All)	OFF	ON
File Transfer Save	OFF	ON
File Transfer Save (HD All)	OFF	ON
Diagnose	OFF	ON
Diagnose (BS)	OFF	ON
Auto function	OFF *1	ON
Shutter remote	Remote	When the Shutter Command exists.
Black Set wobble	OFF	ON
Skin Master	OFF	ON
Knee	ON	OFF *2, 3
DTL	ON	OFF *2, 3
White CLIP	ON	OFF *2
Flare	ON	OFF *2, 3
Hi-Light DTL	ON	OFF *2, 4
AWB CH	A CH	When it is set to remote-control and also is set to OFF. *2, 3

*1 : When the status is not Auto NG during execution of Auto
*2 : At CALL OFF and the scene file OFF
*3 : When the ON/OFF control is not registered on the F KEY
*4 : When the ON/OFF control is not registered but the Analog control is registered on the F KEY

4. TROUBLESHOOTING

The BS incorporates a self-diagnosis function for monitoring the faults of the BS and camera head. The BS operation starts at the same time the power switch is turned ON, during which this function will be ON continuously. When a fault occurs in the BS or camera head, the function promptly detects this and flashes the ALARM indicator on the OCP. As the self-diagnosis information (diagnoses) can be displayed on the PM, the malfunction can be located. Correct the problem promptly and correctly.



When NG is detected by the self-diagnosis function, the ALARM indicator flashes. At this time, self-diagnosis information (diagnose) will automatically be displayed on the VF and PM (for 20 seconds) to enable checking.
Even if the indicator is not flashing, setting the PM IND/PAGE switch on the OCP to “ON” will display the self-diagnosis information on the PM in the same way (Page 1-2: see item 7).

5. SPECIFICATIONS

5.1 Rating

(1) Power Supply

Voltage : DC +11 to +16 V rating DC +12 V

Wattage : Approx. 3.2 W

(2) Dimensions and Weight

Dimensions : 92.2 mm (Width) x 177.5 mm (Height) x 355.5 mm (Depth)

Weight : Approx. 2.1kg

5.2 Control Conditions

● Analog Controls

- RGBM GAIN	- RGBM FLARE	- MASTER GAMMA
- RGBM PEDESTAL	- DTL LEVEL	- KNEE POINT
- KNEE SLOPE	- COLOR SATURATION	- IRIS
- SHUTTER SPEED	- VAR C.TEMP	- F KEY (SKIN DTL GAIN, Hi-Light DTL GAIN)

● ON/OFF Controls

- BARS	- CAL	- COLOR TEMP
- SHUTTER	- VARIABLE SHUTTER	- BLACK STR / PRESS
- GAMMA	- MASTER GAIN	- FILTER (ND, CC, EFF)
- SOFT DTL	- SKIN DTL	- COLOR SATURATION
- AUTO KNEE	- AUTO IRIS	- CALL
- COLOR LINK	- MASTER (When COLOR LINK switch is turn to “ON“.)	
- BLACK GAMMA	- CUSTOM COLOR	- COLOR CORR
- MATRIX	- SUPER KNEE	

- F KEY (Gamma Mode, DTL, Knee, Flare, Hi-Light DTL, Smooth Knee, AWB ch, ATW, Digital Extender, AVC)

● Automatic Functions

- AWB	- ABB	- AUTO SETUP
- KNEE	- IRIS	- ENG FILE

5.3 Environmental Conditions

(1) Operating Conditions

Temperature : 0 to +45℃

Humidity : 30% to 90% (Non condensation)

(2) Storage Temperature

Temperature : -20 to +60℃

(3) Earthquake Resistance

Operating : 10 to 57 Hz 0.3 mmp-p amplitude

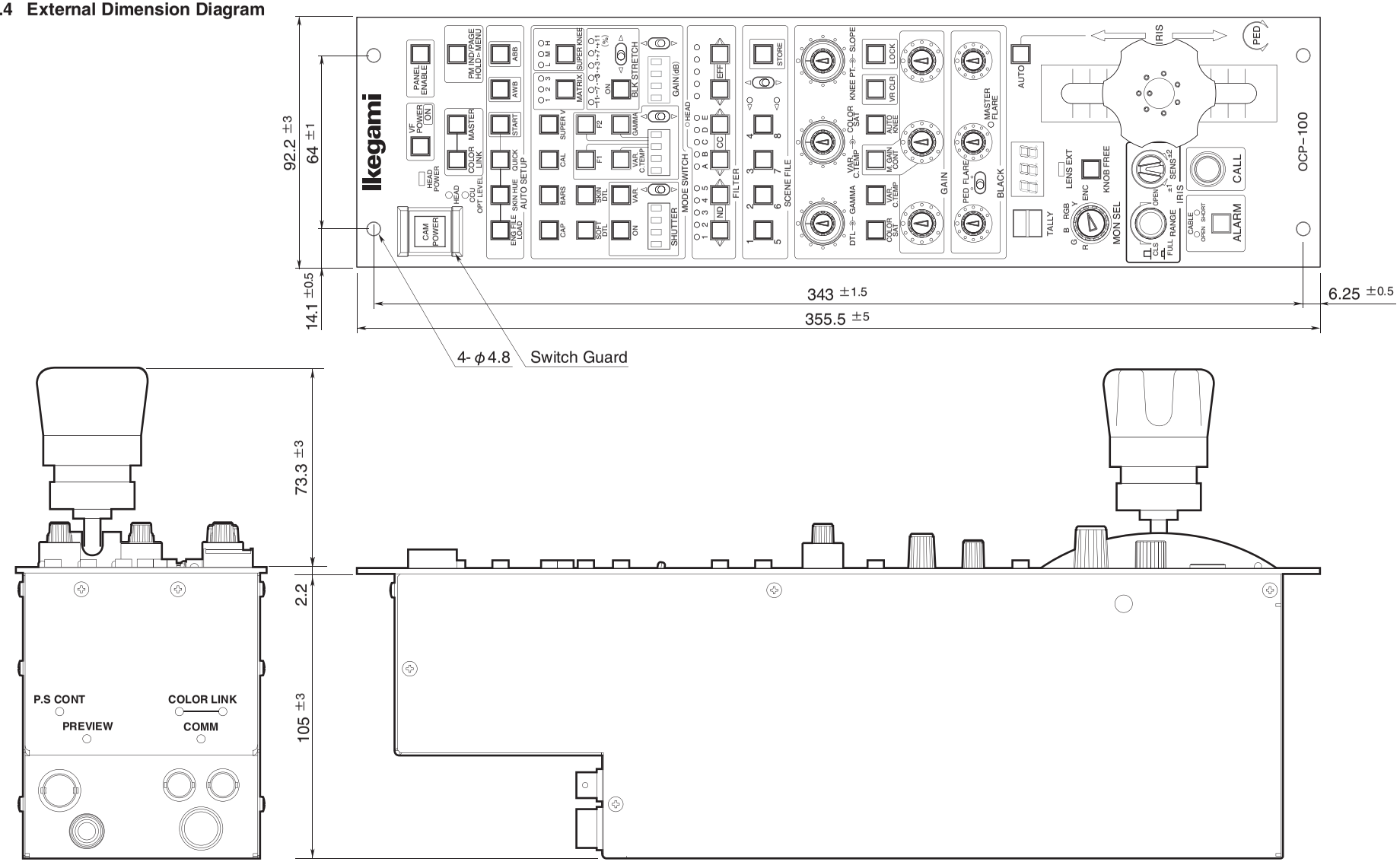
: 57 to 150 Hz 19.6133 m / S2 (2G)

The test is conducted once for each of X, Y, and Z axes with 1 octave (i.e., 57 to 150 Hz) in 1 minute.

(4) EMI

FCC class A

5.4 External Dimension Diagram



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OPERATION MANUAL

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