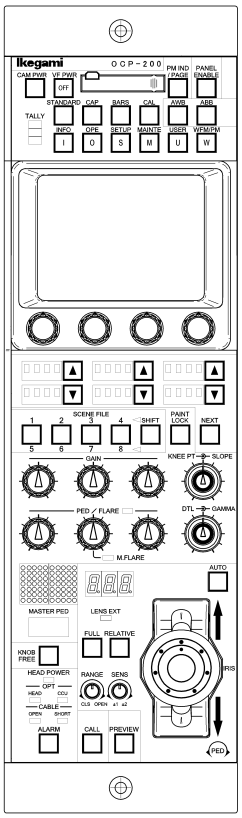
CE

Products conforming to RoHS directive

See Page 2 for CP cable




# OCP-200

## Operation Control Panel

## OPERATION MANUAL

Ikegami

# CP/CP Mini CABLE MAX Length chart

This is the chart of the max. Cable Length of CP/CP cable. Including Remote cable and MCP cable.

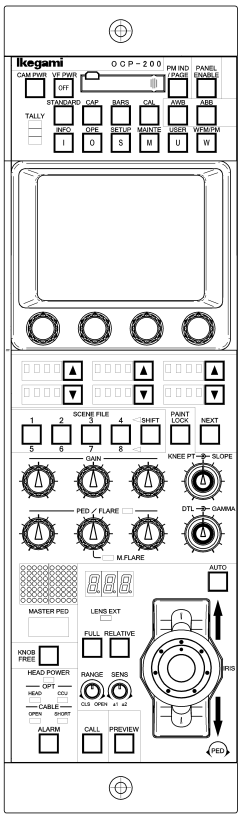
| | Class of Power consumption | 3 – 4 W | 5 W | 10 W | 20 W |
|---|---|---|---|---|---|
| | Model of the control panel | RCP-50B<br>OCP-399/790<br>RM-51/51A | MCP-120E<br>MCP-150E | OCP-200 | MCP-200 |
| ICCP connection<br>(BS/CCU – Control panel) | CP Cable | 300 m | 100 m | 80 m | 30 m *1 |
| | CP Mini Cable | 30 m | 15 m | 10 m | 5 m |
| | Remote Cable | 15 m | 10 m | 5 m | ---- |
| | MCP Cable | ---- | 30 m | ---- | 10 m |
| ARCNET connection<br>(CPH200-Panel) | CP Cable | | | 50 m | 30 m |
| | CP Mini Cable | ---- | ---- | 10 m | 5 m |

*1 : It can be used until 100m cable length with +12V Local Power for MCP-200

| | | |
|---|---|---|
| ARCNET connection<br>(BS/CCU – BSH200) | CP Cable | 300 m |
| | CP Mini Cable | 100 m |

CE

Products conforming to RoHS directive




# OCP-200

## Operation Control Panel

## OPERATION MANUAL

**1010 13th Edition(E)(U)**

Ikegami

***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.

# PRODUCTS CONFORMING PRODUCTS CONFORMING TO RoHS DIRECTIVE

Following products described in this manual are products conforming to RoHS directive.

### •OCP-200 Operation Control Panel

Products conforming to RoHS directive include products that do not contain specified hazardous substances such as lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyl (PBB) and polybrominated diphenyl ether (PBDE) in electrical and electronic equipment excluding following exemption applications based on the EU directive (Directive2002/95/EC).

* About RoHS Directive

The RoHS directive stands for "the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment" and is one of environmental directives in Europe. This directive restricts the use of specified hazardous substances in electrical and electronic equipment.

## ●Applications exempted from RoHS directive compliance

Followings applications are permitted as exemptions from RoHS directive compliance.

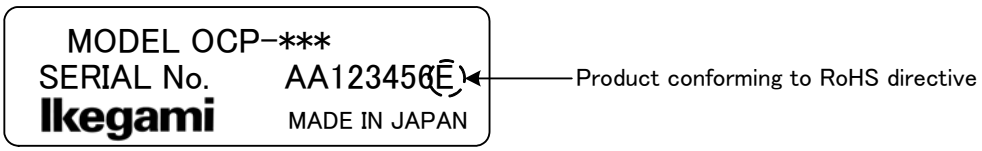
1. Mercury in compact fluorescent lamps not exceeding 5mg per lamp
2. Mercury in straight fluorescent lamps for general purposes not exceeding:
   - halophosphate 10mg
   - triphosphate with a normal lifetime 5mg
   - triphosphate with a long lifetime 8mg
3. Mercury in straight fluorescent lamps for special purposes
4. Mercury in other lamps not specifically mentioned in this Annex
5. Lead in the glass of cathode ray tubes, electronic components and fluorescent tubes
6. Lead as an alloying element in steel containing up to 0.35% lead by weight, aluminum containing up to 0.4% lead by weight and as a copper alloy containing up to 4% lead by weight
7. Lead in following items
   - Lead in high melting temperature type solders (i.e. tin-lead solder alloys containing more than 85% lead)
   - Lead in solders for servers, storage and storage array systems
   - Lead in solders for network infrastructure equipment for switching, signaling, transmission as well as network management for telecommunication
   - Lead in electronic ceramic parts (e.g. piezoelectronic devices)
8. Cadmium plating except for applications banned under Directive 91/338/EEC amending Directive 76/769/EEC relating to restrictions on the marketing and use of certain dangerous substances and preparations
9. Hexavalent chromium as an anti-corrosion of the carbon steel cooling system in absorption refrigerators
10. Lead used in compliant pin connector systems
11. Lead as a coating material for the thermal conduction module C-ring
12. Lead and cadmium in optical and filter glass
13. Lead in solders consisting of more than two elements for the connection between the pins and the package of microprocessors with a lead content of more than 80% and less than 85% by weight
14. Lead in solders to complete a viable electrical connection between semiconductor die and carrier within integrated circuit Flip Chip packages
15. Decabrominated diphenyl ether (Deca-BDE) in polymeric applications

# MINTENACE OF PRODUCTS CONFORMING TO RoHS DIRECTIVE

Work with care about followings for maintenance of products conforming to RoHS directive.

## 1. Identification

・For products conforming to RoHS directive, the letter "E" is appended at the end of the serial number on the label. For models that the letter cannot be appended to the serial number, the letter "E" will be described in a distinguishable position on the label. A description example on a main label is shown below.




Label

・Print-circuit board of the products conforming to RoHS directive is manufactured by following methods.
[1] Blue resist ink is used for the print-circuit board. (The color of conventional print-circuit board is green.)
[2] Either one of the following marks is indicated by a serigraph or label.


Phase 3A


Phase 3

## 2. Soldering

Since the melting point of lead-free solder used for the products conforming to RoHS directive is 20 to 45 degrees Celsius higher than that of conventional solder with lead (Sn-Pb eutectic solder), a high temperature needs to be set to a soldering iron. Taking allowable temperature limit of the parts and stable work into consideration, use a soldering iron with excellent thermal recovery characteristics.

・Recommended solder composition is "Sn/3.0Ag/0.5Cu" or equivalent.
・Separate the soldering iron exclusively for RoHS products and the soldering iron for conventional use.
・Set the temperature of the soldering bit to 350 to 370 degrees Celsius.
The temperature may need to be adjusted according to the size of the copper foil land on the print-circuit board and the tip width of the soldering bit.
・Finish by a lead-free solder looks dull or whitish compared to conventional solder with lead.

## 3. Parts

Be sure to use parts conforming to RoHS directive.

## INFORMATION TO THE USER

The CE mark means that the following products will meet the Directives 2004/108/EC and standards EN55103-1, EN55103-2 (for the Electromagnetic environment E4-E5).

# SAFETY PRECAUTIONS

This manual describes the precautions using various pictorial symbols for you to use the product safely. Please read these precautions thoroughly before use. The symbols and meanings are as follows:

***The following hazard alert symbols are used to indicate the level of impact on the body or property when you do not follow the precautions.***

| | |
|---|---|
| ⚠ **WARNING** | Indicates that mishandling of the product by ignoring this label may lead to a danger resulting in a serious injury or death. |
| ⚠ **CAUTION** | Indicates that mishandling of the product by ignoring this label may lead to a danger resulting in an injury or property damage. |

***The following symbols are used to indicate the expected injury or hazards when you do not follow the precautions.***

| | |
|---|---|
|  | Indicates general cautions on such matters as safe work, procedure, and installation location. Mishandling may not directly lead to death, injury, or property damage. |
|  | Indicates that mishandling may cause an electric shock. |
|  | Indicates that mishandling may cause a fire. |
|  | Indicates that mishandling may cause injury. |

***The following symbol is used to indicate other precautions to prevent damage or hazard from occurring:***

| | |
|---|---|
|  | Indicates prohibited action. |

## ■ *Handling Precautions*

### ⚠ WARNING

#### Regarding the Product

Do not disassemble or modify the product which is not described in this manual. Doing so may cause fire, electric shock, or injury.

#### Regarding the Power

When you disconnect the cable, be sure to hold the plug and pull. Failure to do so may cause a fire or electric shock due to a damaged cable.

To inspect or operate on the inside of the equipment, turn off the power and wait for one or two minutes before starting work. High voltage is present in some modules and connectors of this product.

### ⚠ CAUTION

#### Regarding the Product

Avoid use or storage in the following conditions:
- Extremely high/low temperature
- In direct sunlight for a long time, or near a heater
- High humidity or dusty
- Exposed to water or other liquid
- Strong vibration or shock
- Strong magnetic field or radio waves
- lightning
- In rain without the rain cover

Be sure to hold the plug and pull when you disconnect the cable.
Condensation that cause malfunction may occur in the equipment.

Avoid moving the equipment suddenly from an extremely cold place to a warm place.
Condensation may occur in the Charged Couple Device (CCD) or other parts.

Do not drop or insert a metal object such as a pin or a foreign object into the equipment.

Do not spread or spill water or other liquid on the equipment.

Do not subject the equipment to a strong shock or vibration.
Doing so may cause damage or malfunction of the equipment.

### Regarding the Modules

Pay attention to the following points when handling the modules:
- Do not let the parts of the modules or the printed wiring pattern to touch the metal parts that can be energized.
- Avoid placing or storing the modules in humid places.
- Do not touch the parts of the modules or the printed wiring pattern with dirty or wet hands. Do not touch them with hands unless necessary.

### Regarding the Power and the Lithium Battery

Use the product in compliance with the rating of the fuse. Otherwise, a fault can occur.

Do not use an unspecified battery.
Wrong usage of batteries may cause liquid leak, explosion, and heat, and at worst injury or fire.
When changing or discarding a battery, please contact Ikegami's sales and service centers.

## ■ *Maintenance*

### Regarding the product

Before performing maintenance on the product, be sure to turn off the power for safety and for protection against malfunction.

Clean the product using a dry and soft cloth.

If the product is very dirty, wipe with a cloth moistened with water or neutral detergent and wrung out. If neutral detergent is used, wipe again with a cloth dipped in clear water and wrung out.

## ■ *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 READ THE HOW TO READ THE OPERATION MANUAL

This page explains general notes on reading the OCP-200 Operation Manual, and the symbols and notations used in the manual.

## ■Notes on the Manual

- This manual is written for readers with a basic knowledge of handling a broadcast camera, CCU, etc.
- The contents of this manual are subject to change without notice in the future.

## ■Symbols

The symbols used in this manual are as follows.

| | |
|---|---|
| ***CAUTION*** | Things you have to be careful during operation. Be sure to read. |
| ***Note*** | Supplementary information or guidance |
| ***Reference*** | Sections where related information is available |

## ■Notations

The following notations are used in this manual.

| | |
|---|---|
| This product, OCP | Indicates OCP-200 OPERATION CONTROL PANEL |
| Camera head | Indicates general broadcast cameras. |
| Camera | In this manual stands for both Camera Head and BS/CCU against Control Panel. |

## ■Illustrations and Displays

The illustrations and displays in the text are provided for explanation and may be slightly different from the actual equipment or image.

## ■Related Manuals

Refer to the operation manuals and maintenance manuals accompanying the camera head, CCU, and each control panel to be used.

# OCP-200 OPERATION CONTROL PANEL

# OPERATION MANUAL

## CONTENTS

# 1. OUTLINE

## 1.1 Outline

This is the operation control panel which is designed to use with BS (Base Station)/CCU (Camera Control Unit) or CP-HUB.

## 1.2 Feature

### ● Network control capability

Not only current serial command control but network command control is also available. By using network technology, panel assignment or another various application will be available. Serial command and network command can be selected by the switch on OCP-200.

### ● 3.5inch color LCD display with touch sensor

LCD menu includes maintenance control function such as current MCP employs. And optimized menu layer supports easier control for both operation and maintenance.

### ● Memory card slot

Various files of Camera can be saved and loaded. And update of OCP firmware for new function via memory card is also available.

### ● Knob-free function

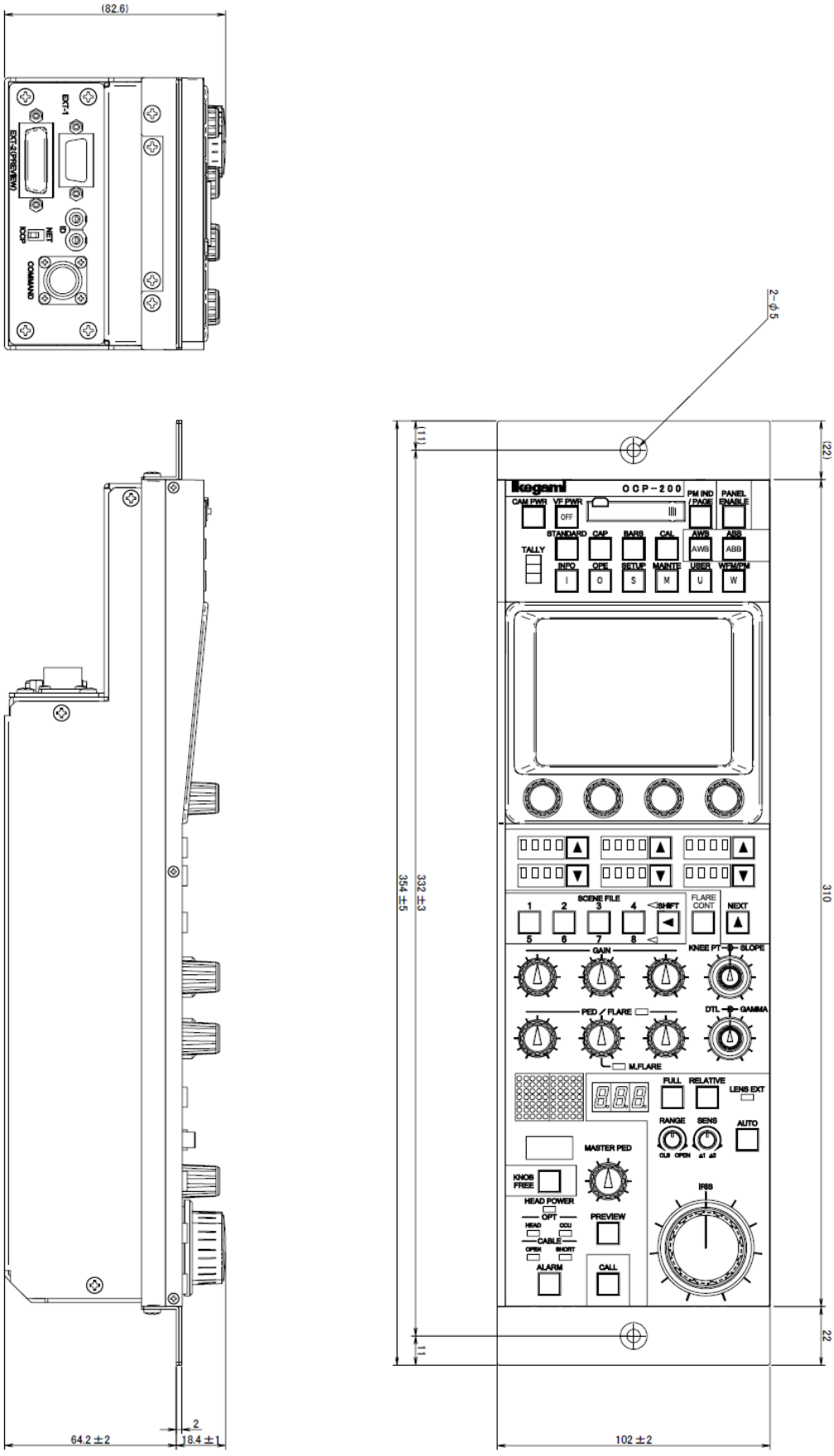
OCP-200 employs knob-free function which has merits of both absolute control by potentiometer and relative control by Rotary Encoder.
It provides two merits of good knob rotation feeling of potentiometer and avoiding data jump of camera caused by Rotary Encoder position at panel control switching. Knob position can be offset if rotation angle are limited in one direction because knob rotation doesn't reflect control parameter while pushing Knob-Free button.

***Note*** OCP control doesn't reflect to the camera if you operate the function of which camera doesn't have.

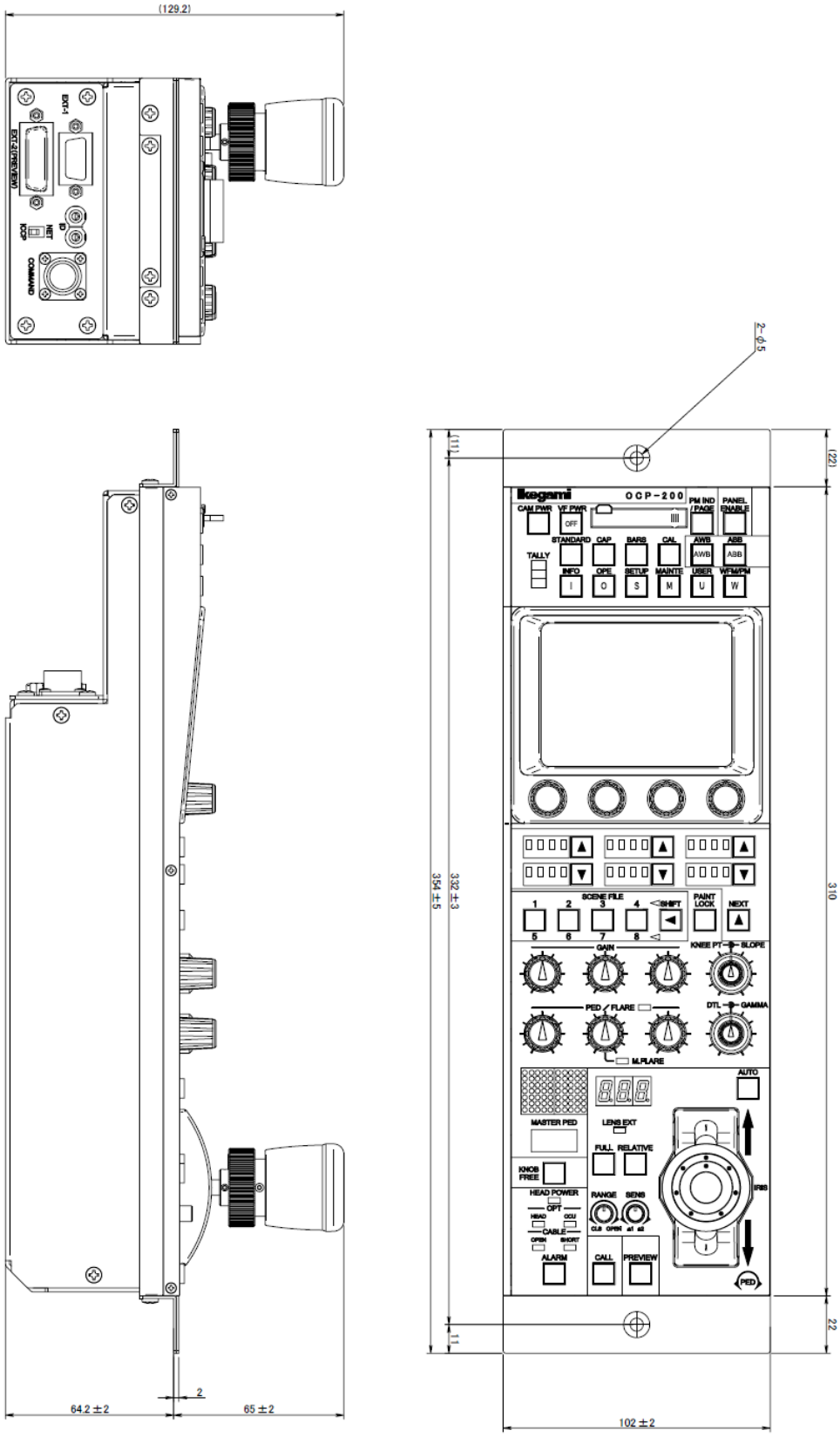
***Reference*** Please find camera operation manual about control functions.

## 1.3 External Appearance

### 1) VR TYPE



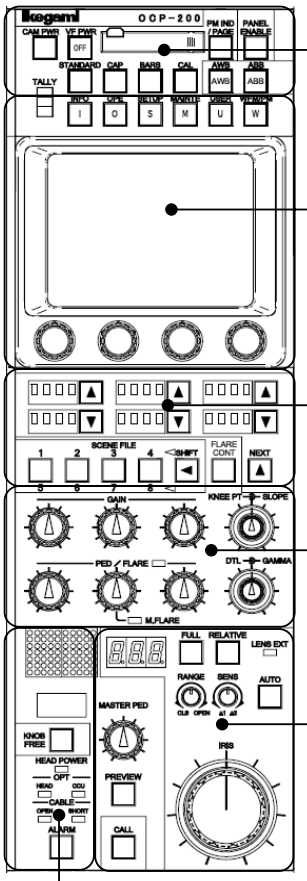
## 2) JOYSTICK TYPE



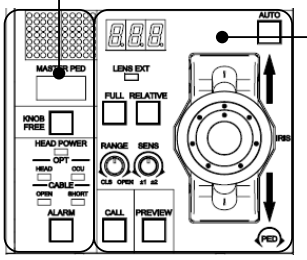
# 2. NOMENCLATURE and FUNCTIONS

Will show each function block, sine OCP has so many control items.

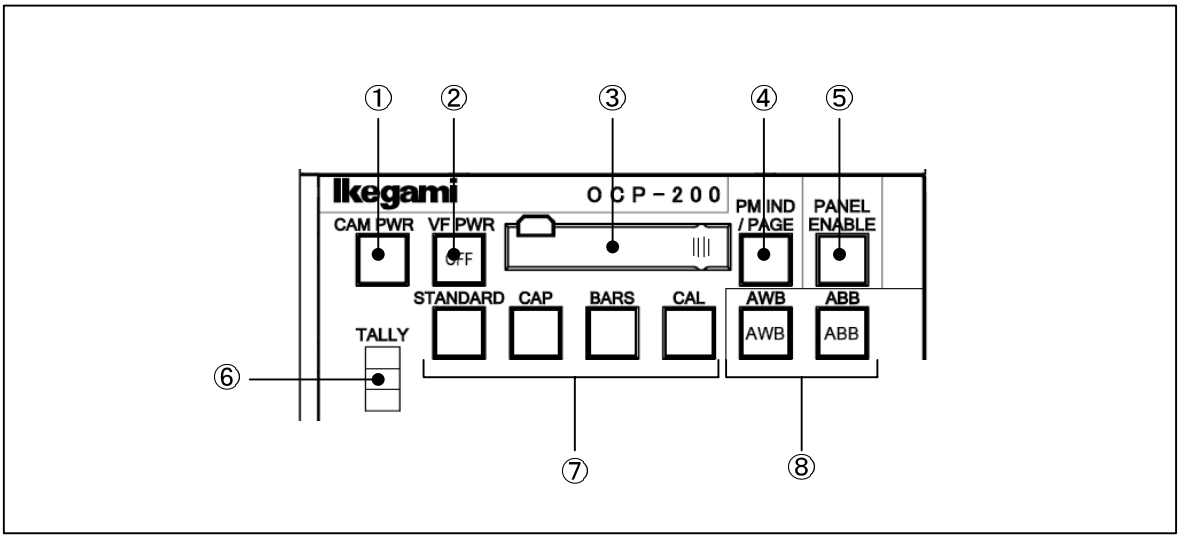
VR TYPE




JOYSTICK TYPE



## 2.1 Camera Function Portion




### ① CAM PWR Switch

ON/OFF control of power supply to camera head available with this switch.
Push this switch for power supply ON from power supply OFF (Switch lamp: OFF). Keep pushing this switch 2 seconds for power supply OFF from power supply ON (Switch lamp: ON). This switch only enables when OCP-200 is connected to BS/CCU (BS-79LP etc.) which has camera power supply control function.

### ② VF PWR Switch

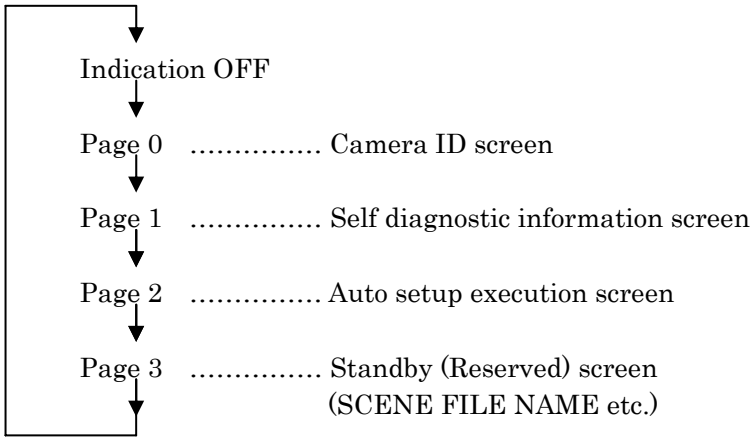
Power ON/OFF of Viewfinder (VF) can be controlled by this switch. Switch lamp lights when VF power is off. Push VF PWR switch two seconds to VF power “OFF”

### ③ Memory Card Slot

This slot is used to save/load the data of Camera Head or BS/CCU setting parameter to/from memory card (SD Card).
To use memory card, insert memory card calmly until clicking. And to eject memory card, push top of memory card calmly until click. Memory card will pop up to be picked up. Slot should be used for dust proof when memory card is not used. Access indictor lamp on the side of slot lights in saving/loading. Do not remove memory card when access indicator is lighting. There is a possibility to damage data of not only memory card but Camera Head and BS/CCU.

### ④ PM IND/PAGE Switch

Various information of characters are overlaid on BS/CCU PM output. Each of information is indicated sequentially as following by pressing this switch.




### ⑤ PANEL ENABLE Switch

Enables to OCP operation.
OCP control is available when Switch light is ON.

### ⑥ TALLY Indicator

Red, Green and Yellow Tally indicator.

### ⑦ MODE Switch

- **STANDARD Switch**

  To clear all Camera and BS/CCU data to standard setting. Press this switch to come up LCD menu and operation is possible with touch panel.

  By pressing this switch while pressing KNOB FREE switch, changed parameter by control knob rotation can be cleared.

***Reference*** Refer to “13. STANDARD FUNCTION” , “8.3 Lumped Manual Clear of Control Knob Operation” for detail operation procedure.)

- **CAP Switch**

  Sets optical filter to CAP position or Iris close.

- **BARS Switch**

  Outputs Color Bar Signal to Video Output.

- **CAL Switch**

  100% or 200% CAL signal is generated for the Calibration of the Video Processing Circuit.

  CAL OFF(Light OFF) →CAL100% (Light ON) →CAL200% (Blink) →CAL OFF (Light OFF)

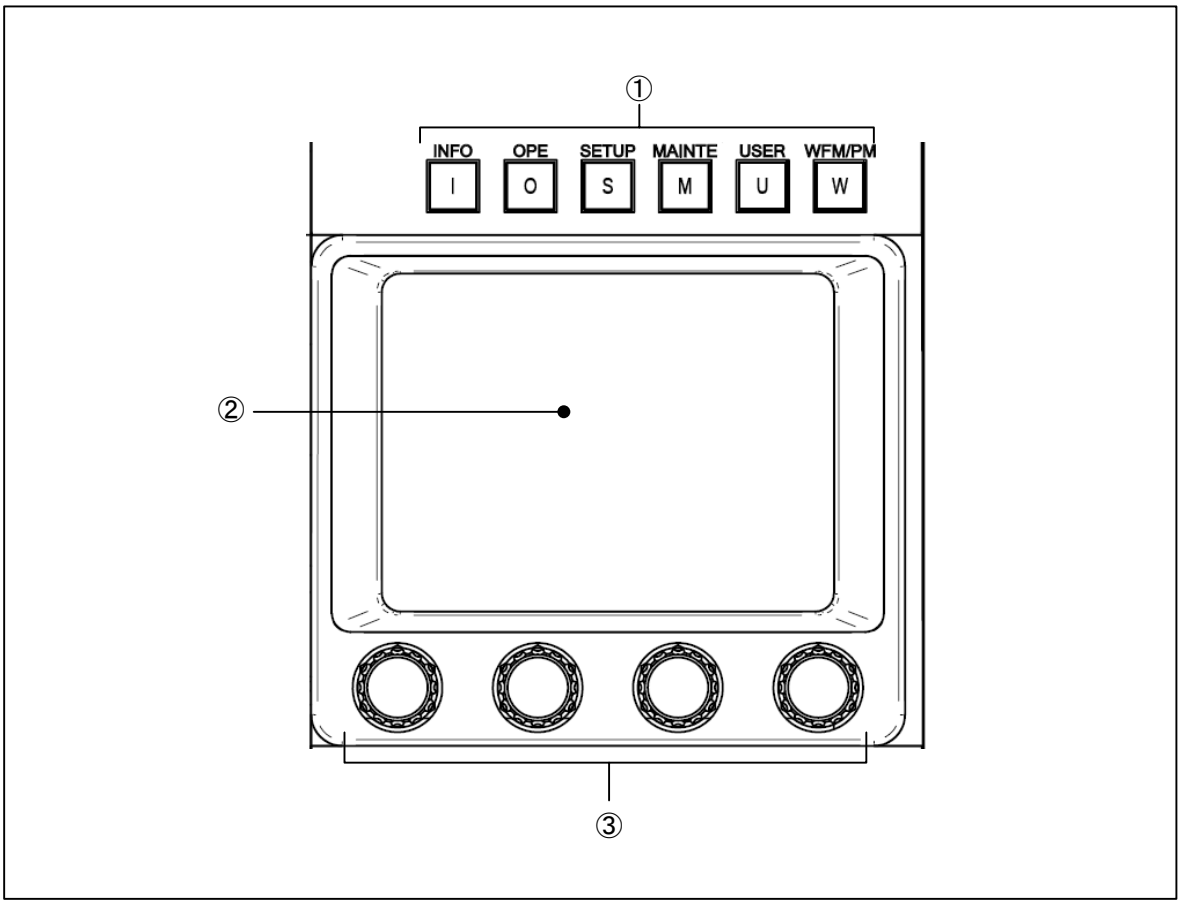
  It is possible to inhibit (guard) the switch of CAL200%.

***Reference*** Refer to “18. PANEL SETUP(PANEL CONFIG.)” for detail.

### ⑧ AWB/ABB Switch

Executes AWB (Auto White Balance) or ABB (Auto Black Balance). After completing execution, lamp turns off when the result is good, but lamp blinks when the result is no good. In case of NG, press this switch to clear lamp blinking.

## 2.2 LCD Menu Portion




### ① FUNCTION Switch

- **INFO Switch**
  Indicates status information such as ON/OFF setting condition of Camera Head or BS/CCU on LCD display.
- **OPE Switch**
  Enables LCD menu to operation mode. This mode covers functionality of existing operation control panel which doesn't employ LCD menu.
- **SETUP Switch**
  Enables LCD menu to setup mode.
- **MAINTE Switch**
  Enables LCD menu to maintenance mode.
- **USER Switch**
  Can be recalled one function to the LCD screen. User can assign one function to this switch and it can be recalled by pressing this switch.
- **WFM/PM Switch**
  Calls WFM (Waveform Monitor)/PM(Picture Monitor) selection switch on LCD display.

### ② LCD Touch Screen

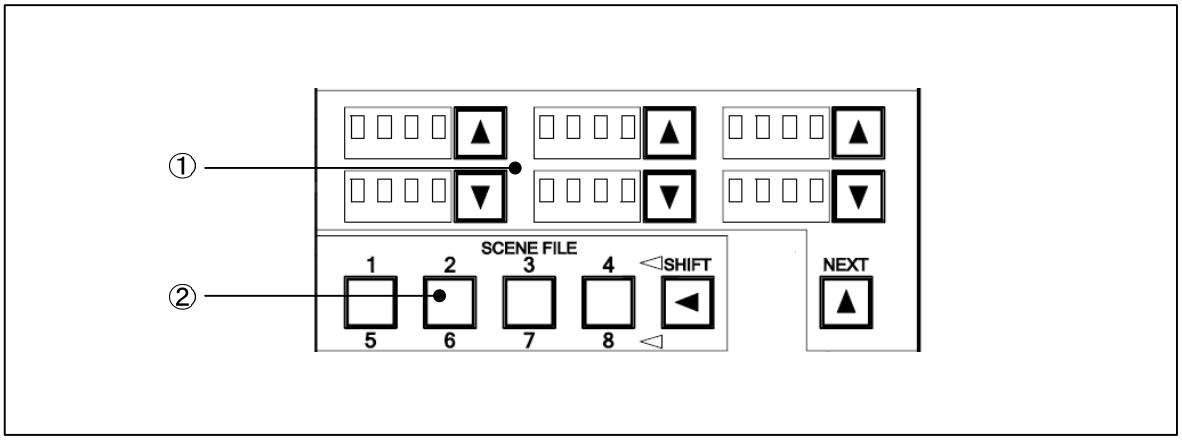
Combines LCD panel and touch sensor. It has both display function and switch function to use for various camera control setting.

***Reference*** Refer to “4. LCD MENU OPERATION” for detail operation procedure.

### ③ Rotary Encoder Knob

Is used to control parameters when function switches are displayed on LCD display.

## 2.3 Select Function Portion




### ① SELECT Switch

▲ ▼ Switches for mode selection.

- **ND** ND filter position selection
- **CC** CC filter position selection
- **Gain** Gain selection for camera head
  Normally set at “0dB”.
- **EFF** EFFECT Filter Position selection
- **Gamm** Gamma curve setting(preset step selection) of Camera Head
  Normally set at “0.45”.
- **Bkst** Black stretch/press setting
  - Black stretch: +3, +5, +7, +9, +11%
  - Black press: -3, -5, -7, -9, -11%
  Setting range depends on each model of camera head.
  Normally set at “OFF”.
- **AWB** AWB Memory Selection（Ach/Bch/OFF）
  (Initial H means for Camera Setting)

In case of the camera is single optical filter configuration, “Fltr” is indicated instead of ND or CC.

When ▲ ▼ switches don’t light, it is impossible to set from OCP because camera head has a control priority. The control priority can be moved from the camera head side to the OCP side by pushing ▲ or ▼ switch when there is control priority on the camera head. The switch blinks when ▲ or ▼ switch is pushed between a few seconds when there is priority in OCP. The confirmation sounds and can move the option from the OCP side to the camera head by having pushed for about one second after the switch starts blinking.

Condition of ▲ , ▼ Switch for ND, CC and EFF.

- **Switch Lights** : OCP has control priority. Then Filter Position can be changeable.
- **Switch doesn't light** : Camera Head has control priority. Then Filter Position can NOT be changed.
- **Switch Blinks** : If OCP has control priority, Keep pushing one second to change control priority.

ND/CC/Gain and EFF/Gamm/Bkst can be selected by NEXT switch.

***Note*** To confirm the state of electric color correction filter (C.Temp 5600K), the * mark can be added to the status window of the CC filter. When C.Temp 5600K is turning on, * mark is displayed.

***Reference*** Refer to “18. PANEL SETUP(PANEL CONFIG.)” for change method.

### ② SCENE FILE Switch

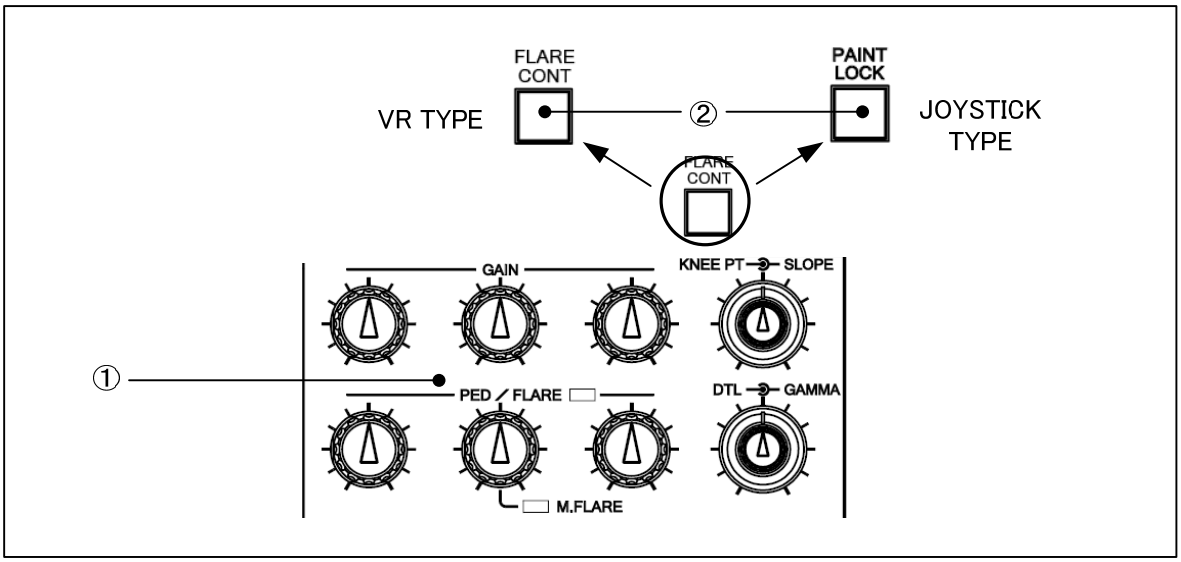
Saves/loads scene file 1 to 8. file group 1 to 4 and group 5 to 8 are selected by SHIFT switch.

- **Save** : Press file a number button 1 to 8 in 2 seconds.
- **Load** : Push file a number button 1 to 8.

***Note*** Previous OCP has a function of Control Knob uncontrollable until moving to the center after Scene File is loaded. However, OCP-200 doesn’t have this function because control logic of Control Knob is different. Use Knob Free function in order to move Control Knob to the center after Scene File loading.

***Reference*** Refer to “5.4 Knob Free Function” for detail operation procedure.

## 2.4 Control Knob Portion



### ① Control Knob

- **R/G/B GAIN Control Knob**

  To control R/G/B gain.

  G gain control reacts R, B gain control.

- **R/G/B PED/FLARE Control Knob**

  To control R/G/B of Pedestal or Flare.

  Switching of Pedestal/Flare can be done with ②FLARE CONT Switch(VR TYPE) or PAINT LOCK Switch(JOYSTICK TYPE).

  If center knob is assigned for master flare control, M.FLARE indicator lamp turns on.

  The selection of Master Flare or G.Flare cane be done by "Panel Set-up(Panel Config.) Menu". If "Auto" mode is selected, it activates either "Master Flare" for the camera has Master Flare function or "G.Flare" for the other camera has not Master Flare function.

***Reference*** Refer to "18. PANEL SETUP(PANEL CONFIG.)" for change method.

- **KNEE POINT/SLOPE Control Knob**

  To set KNEE SLOPE and KNEE POINT by manual (hand).

- **DTL/GAMMA Control Knob**

  To set DTL level and MASTER GAMMA level.

### ② FLARE CONT Switch（VR TYPE）

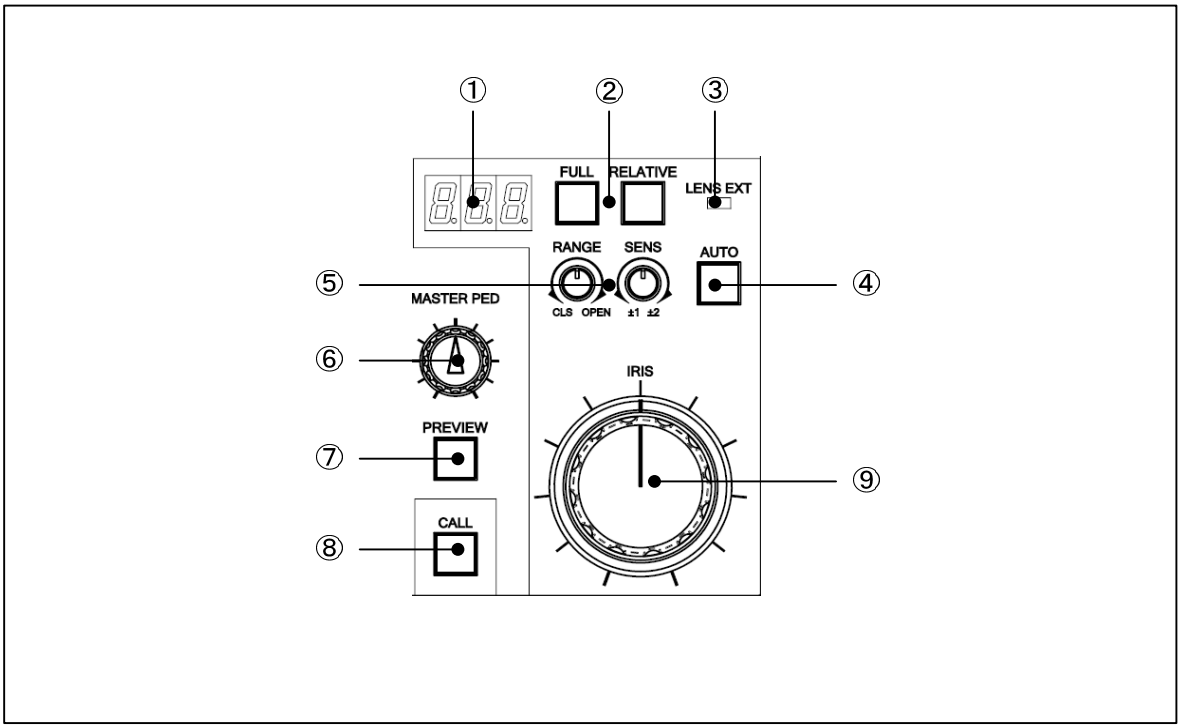
To set R/G/B PED/FLARE Knob for Pedestal control or Flare control. LED and this switch lights in case of Flare control mode.

### ② PAINT LOCK Switch（JOYSTICK TYPE）

If this switch is pressed to ON, ① all Control Knobs are inhibited and Control Knob rotation doesn't affect. If this switch pressed to OFF, Inhibit of Control Knob is released without data jump regardless the Knob position.

By pressing this switch while pressing KNOB FREE Switch, R/G/B PED/FLARE Control Knob can be set Pedestal Control or Flare Control. LED lights when the switch is set to Flare Control.

## 2.5 IRIS/PEDESTAL Control Portion (VR TYPE)




### ① IRIS Indicator (VR TYPE)

To display F number of lens.
Indicate "---" without F number at F16 to Close.

### ② FULL/RELATIVE Switch (VR TYPE)

- **FULL Switch**
  To fix Iris Control range of ⑨ to FULL Range.
- **RELATIVE Switch**
  To set IRIS CONTROL to Relative Mode.
  By pressing this switch, Lens Iris position will be changed in accordance with the Iris value of OCP.

***Reference*** Refer to "6. ABSOLUTE VALUE IRIS CONTROL", "RELATIVE VALUE IRIS CONTROL" for detail operation.

### ③ LENS EXT Indicator (VR TYPE)

Lights up when the lens extender is ON

### ④ AUTO IRIS Switch (VR TYPE)

To set AUTO IRIS mode.

***Reference*** Refer to "6. ABSOLUTE VALUE IRIS CONTROL", "RELATIVE VALUE IRIS CONTROL" for detail operation.

### ⑤ RANGE/SENS Control Knob (VR TYPE)

- **RANGE Control Knob**

  To set center position of Item ⑨ IRIS control.

- **SENS Control Knob**

  To set knob rotation sensitivity of Item ⑨ IRIS control. Sensitivity can be set from +/- 1 F stop to +/- 2 F stop.

***Reference*** Refer to "6. ABSOLUTE VALUE IRIS CONTROL", "RELATIVE VALUE IRIS CONTROL" for detail operation.

### ⑥ MASTER PED Indicator (VR TYPE)

Displays mater pedestal setting.

### ⑦ PREVIEW Switch (VR TYPE)

When this switch is operated, the PREVIEW signal is output from the EXT-2(PREVIEW) connector. And, the PREVIEW signal is output from networked BS hub and BS/CCU.
While pressing PREVIEW Switch, PV(-) and COM of EXT-2(PREVIEW) Connector are contacted. But PREVIEW Switch is not pressed, PV(+) and COM of EXT-2(PREVIEW) Connector are contacted.

***Note*** The output of the PREVIEW signal of the BS hub and BS/CCU can be prohibited by setting Panel Config of OCP-200.

### ⑧ CALL Switch (VR TYPE)

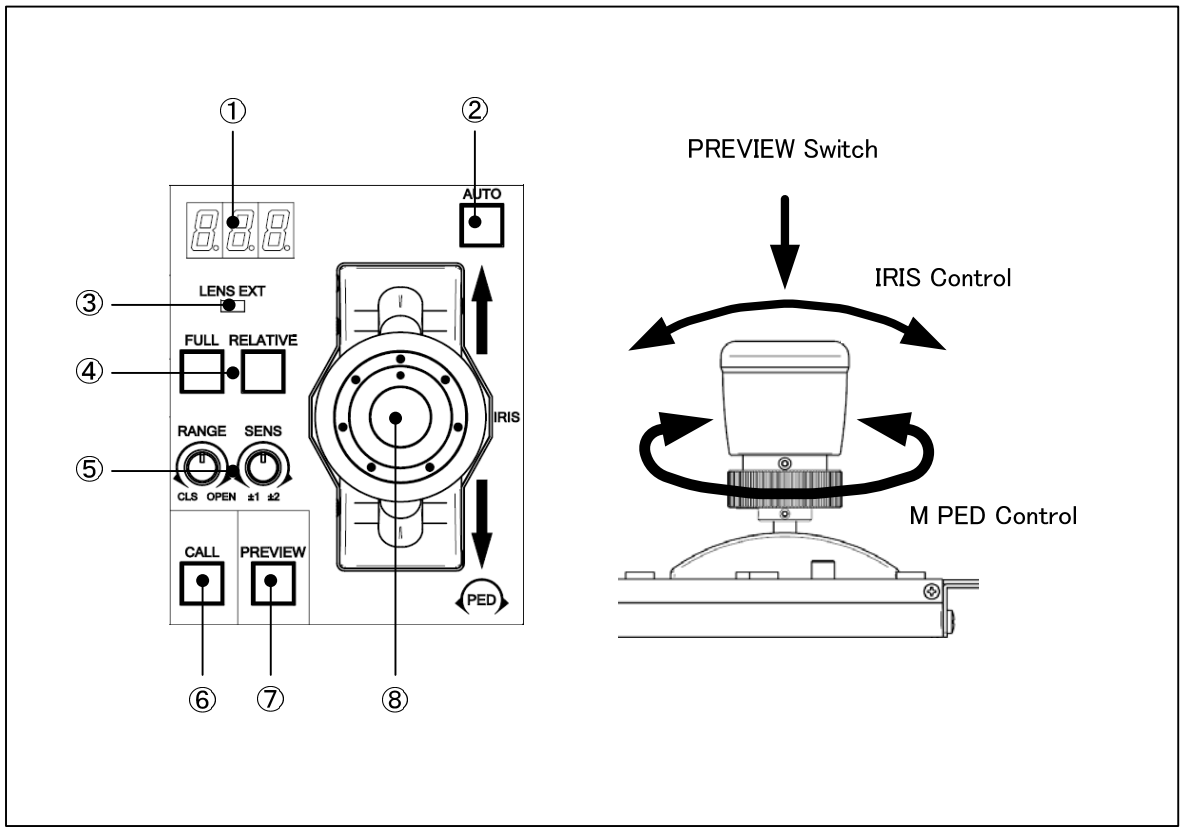
To press to light RED TALLY of camera head and BS/CCU.
Call switch will light when call switch of camera head and BS/CCU is pressed.

### ⑨ IRIS Control (VR TYPE)

To control IRIS. At the AUTO IRIS mode, IRIS can be controlled with +/- 1 stop of F number.

***Reference*** Refer to "6. ABSOLUTE VALUE IRIS CONTROL", "RELATIVE VALUE IRIS CONTROL" for detail operation.

## 2.6 IRIS/PEDESTAL Control Portion (JOYSTICK TYPE)




### ① IRIS Indicator (JOYSTICK TYPE)

To display F number of lens.
Indicate "---" without F number at F16 to Close.

### ② AUTO IRIS Switch (JOYSTICK TYPE)

To set AUTO IRIS mode.

***Reference*** Refer to "6. ABSOLUTE VALUE IRIS CONTROL", "RELATIVE VALUE IRIS CONTROL" for detail operation.

### ③ LENS EXT Indicator (JOYSTICK TYPE)

Lights up when the lens extender is ON

### ④ FULL/RELATIVE Switch (JOYSTICK TYPE)

- **FULL Switch**
  To fix Iris Control range of ⑧ to FULL Range.
- **RELATIVE Switch**
  To set IRIS CONTROL to Relative Mode.

***Reference*** Refer to "6. ABSOLUTE VALUE IRIS CONTROL", "RELATIVE VALUE IRIS CONTROL" for detail operation.

### ⑤ RANGE/SENS Control Knob (JOYSTICK TYPE)

- **RANGE Control Knob**
  To set center position of Item ⑧ IRIS control.
- **SENS Control Knob**
  To set knob rotation sensitivity of Item ⑧ IRIS control. Sensitivity can be set from +/- 1 F stop to +/- 2 F stop.

***Reference*** Refer to "6. ABSOLUTE VALUE IRIS CONTROL", "RELATIVE VALUE IRIS CONTROL" for detail operation.

### ⑥ CALL Switch (JOYSTICK TYPE)

To press to light RED TALLY of camera head and BS/CCU.
Call switch will light when call switch of camera head and BS/CCU is pressed.

### ⑦ PREVIEW Switch (JOYSTICK TYPE)

When this switch is operated, the PREVIEW signal is output from the EXT-2(PREVIEW) connector. And, the PREVIEW signal is output from networked BS hub and BS/CCU.
While pressing PREVIEW Switch, PV(-) and COM of EXT-2(PREVIEW) Connector are contacted. But PREVIEW Switch is not pressed, PV(+) and COM of EXT-2(PREVIEW) Connector are contacted.

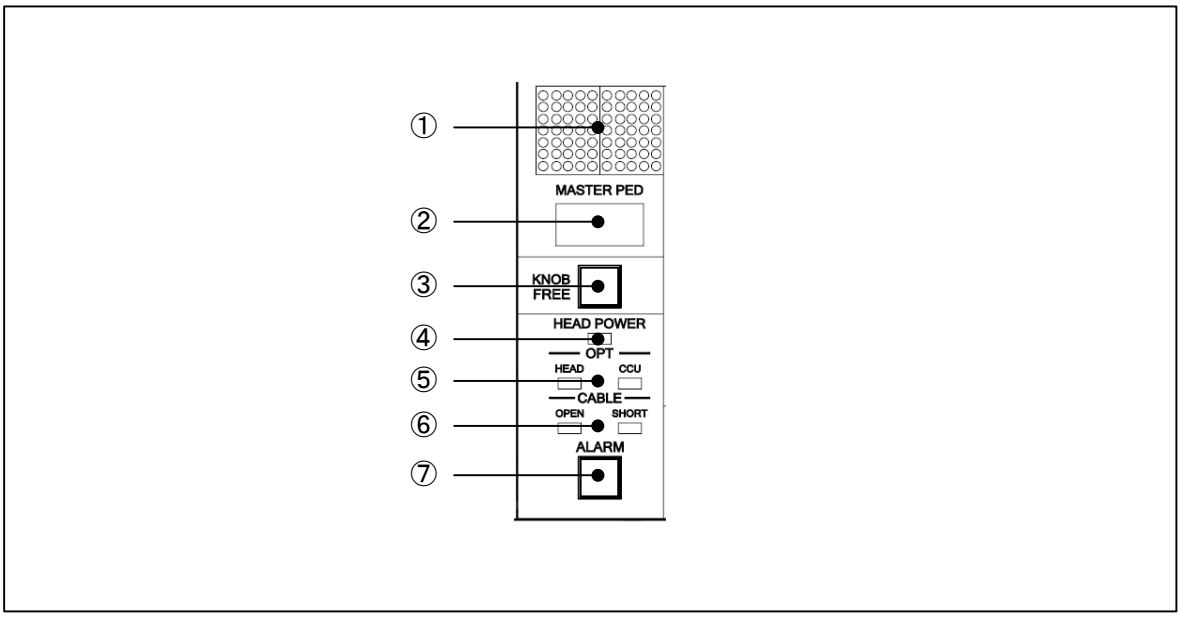
***Note*** The output of the PREVIEW signal of the BS hub and BS/CCU can be prohibited by setting Panel Config of OCP-200.

### ⑧ IRIS Control (JOYSTICK TYPE)

To control IRIS and Master PEDESTAL by joystick. At the AUTO IRIS mode, IRIS can be controlled with +/- 1 stop of F number. Press joystick head to PREVIEW switch "ON". Control action is parallel operation with PREVIEW Switch.

***Reference*** Refer to "6. ABSOLUTE VALUE IRIS CONTROL", "RELATIVE VALUE IRIS CONTROL" for detail operation.

## 2.7 Status Indicate Portion (JOYSTICK TYPE)




### ① Camera Number Indicator

Program Camera Number of connected is displayed.

***Reference*** Refer to “11. SETTING OF PANEL ASSIGN ANDPROGRAM NUMER” for detail.

### ② MASTER PEDSTAL Indicator

Indicates MASTER PEDSTAL parameter.

### ③ KNOB FREE Switch

While pressing this switch, following mentioned knobs set FREE to hold control parameter if knobs are rotated; Knobs for Item 1 in “2.4 Control Knob Portion”. M.PED Control Knob of Item ⑥ and IRIS SENCE Knob of Item ⑤ and IRIS Control Knob of Item ⑨ in “2.5 IRIS PEDESTAL CONTROL(VR TYPE)” at Relative Mode and M.PED Control Knob of Item ⑧ and IRIS SENCE Knob of Item ④ and IRIS Control Knob of Item ⑧ in “2.6 IRIS PEDESTAL CONTROL (VR TYPE)” at Relative Mode.

In case of AWB or Auto Setup is executed when R/G/B GAIN knob center is offset, or ABB or Auto Setup is executed when R/G/B of PED/M.PED is offset, Knob center will be offset from mechanical center position. Those offset of each parameter can be cleared if you rotate Knob to mechanical center with pressing this switch.

***Reference*** Refer to “5.4 Knob Free Function” for detail operation.

***Note*** After OCP KNOB FREE operation or MCP control to OCP, VR position data are shifted from previous OCP setting. To correct shifted VR position data, set Knobs on the mechanical center first and press STANDARD switch mentioned at “2.1 Camera Function Portion” with pushing KNOB FREE switch. This procedure sets mechanical center to previous control center of all Knobs.

### ④ HEAD POWER Indicator

When the power supply of the camera head is “ON", it lights.

### ⑤ OPT Indicator

To indicate optic signal level at fiber optic cable transmission. Optic signal level from Camera Head to BS/CCU shows on CCU Indicator and the signal level from BS/CCU to Camera Head that shows on Head Indicator. Each indicator express five levels of optical signal condition with combination of Green/Red/Amber color and ON/OFF/BLINK.

| Condition | Indicator | | Condition |
|---|---|---|---|
| OK | Green | ON | Optic signal level is good. |
| ATTENTION | Amber | OFF | Operation available although level becomes lower. |
| WARNING | Amber | Blink | Operation will be suspended as the level becomes much lower. Optic connector will require clean up. |
| NG | Red | ON | The level is NG. Clean up optic connector urgently. |
| NON CONNECTION | - | OFF | Optic fiber cable is not connected. |

***Note*** Optic signal level becomes lower not only by dirty fiber optic connector but also multiple cable connection or irregular reflex index of fiber cable. If OPT Indicator shows Red/Amber light or blinking, check and cure the cause of problem.

### ⑥ CABLE Indicator

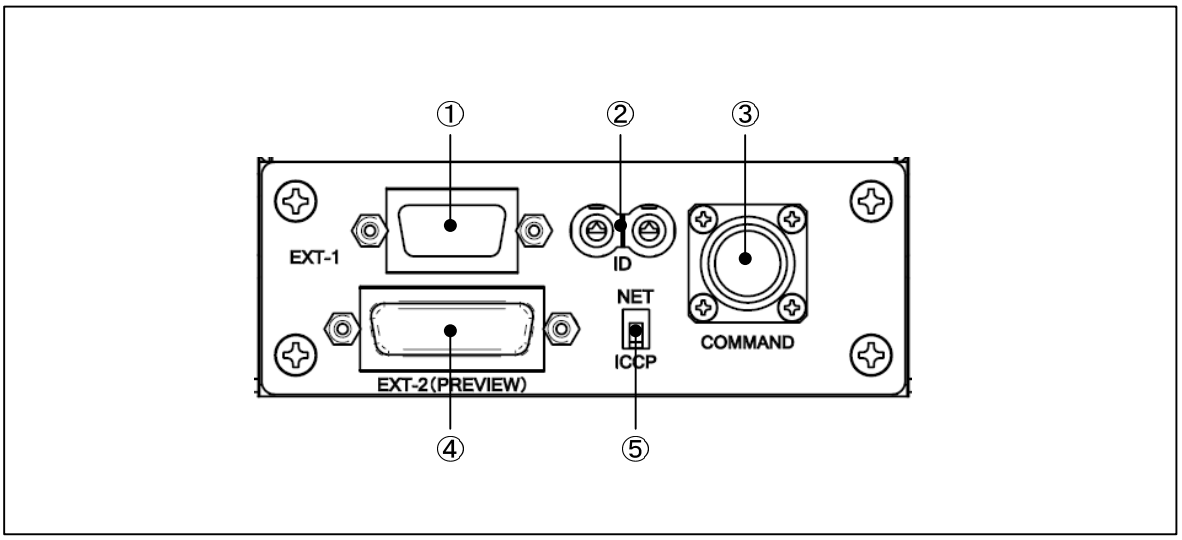
To indicate optic fiber or triax cable condition between Camera Head and BS/CCU. If any problem is detected, each indicator turns on.

**OPEN** **:** Disconnection or breaking cable
**SHORT** **:** Short circuited

### ⑦ ALARM Indicator(Switch)

Alarm lamp will blink when any NG is found on the system by the detection of self-diagnosis function. When the switch is pushed when blinking, simple Diagnos is displayed on the LCD.

## 2.8 Connector panel




### ① EXT-1 Connector

The connector is for system expansion (Not used yet).

***Reference*** Refer to "21.2 Pin Assignment for External Connector" for the detail of Pin Assignment.

### ② ID Number Setting Switch

Used for setup of network ID in case of network control. *ID number must not duplicate to ID of another unit.

***Reference*** Refer to "3.3 Network ID setup" for the detail setup procedure.

### ③ COMMAND Connector

Connect CP cable.

### ④ EXT-2 (PREVIEW) Connector

This connector is for system expansion.
When Preview Switch is pressed, PV(-) and COM are shorted.
When Preview Switch is NOT pressed, PV(+) and COM are shorted.
And it has Tally In/Out and Program Camera Number Output capability.

***Reference*** Refer to "21.2 Pin Assignment for External Connector" for the detail of Pin Assignment.

### ⑤ NET/ICCP Changeover Switch

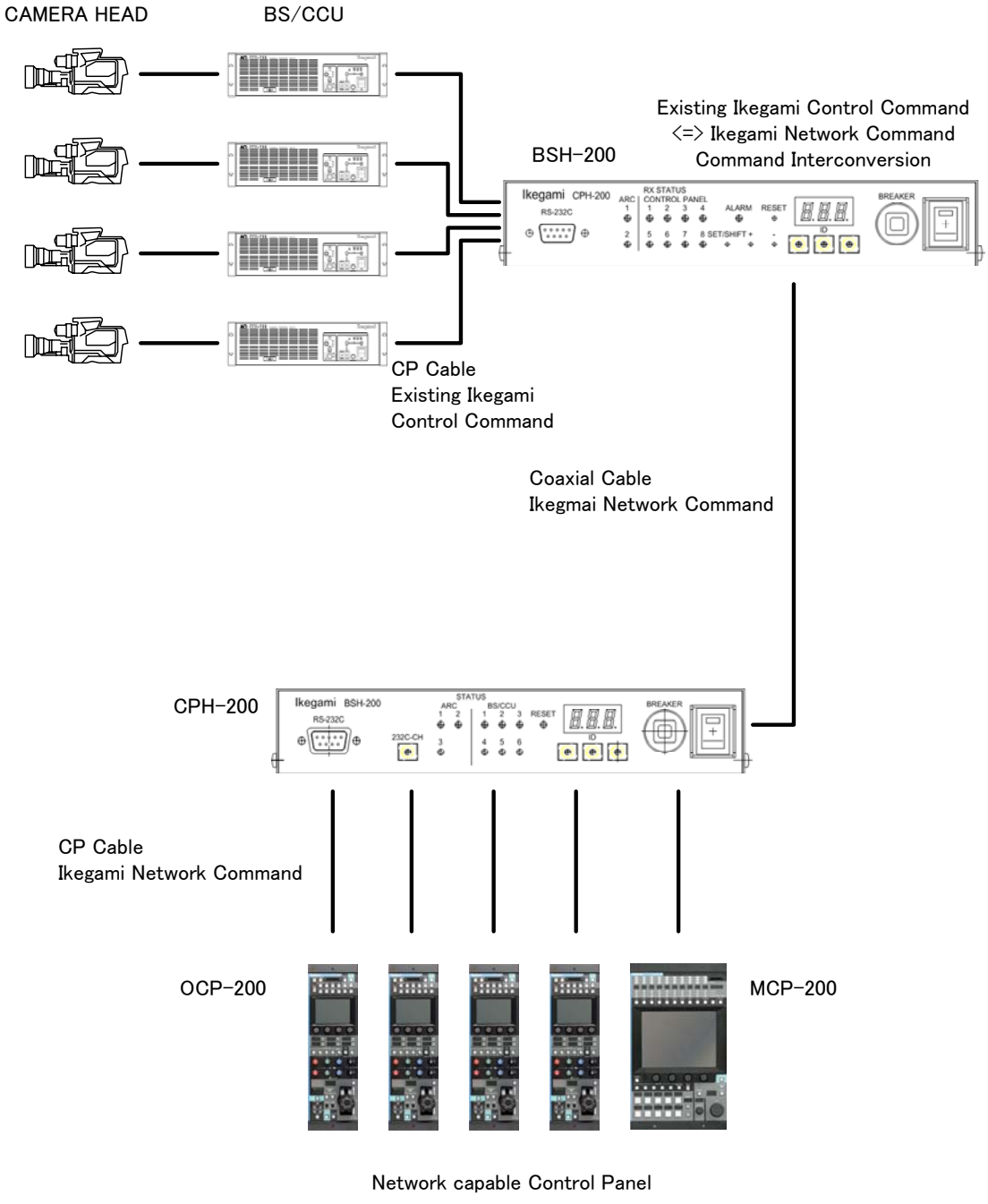
To change between Network connection and Ikegami Command (ICCP) connection.

**NET** : For Network connection
**ICCP** : For Ikegami Command connection

# 3. NETWORK OPERATION

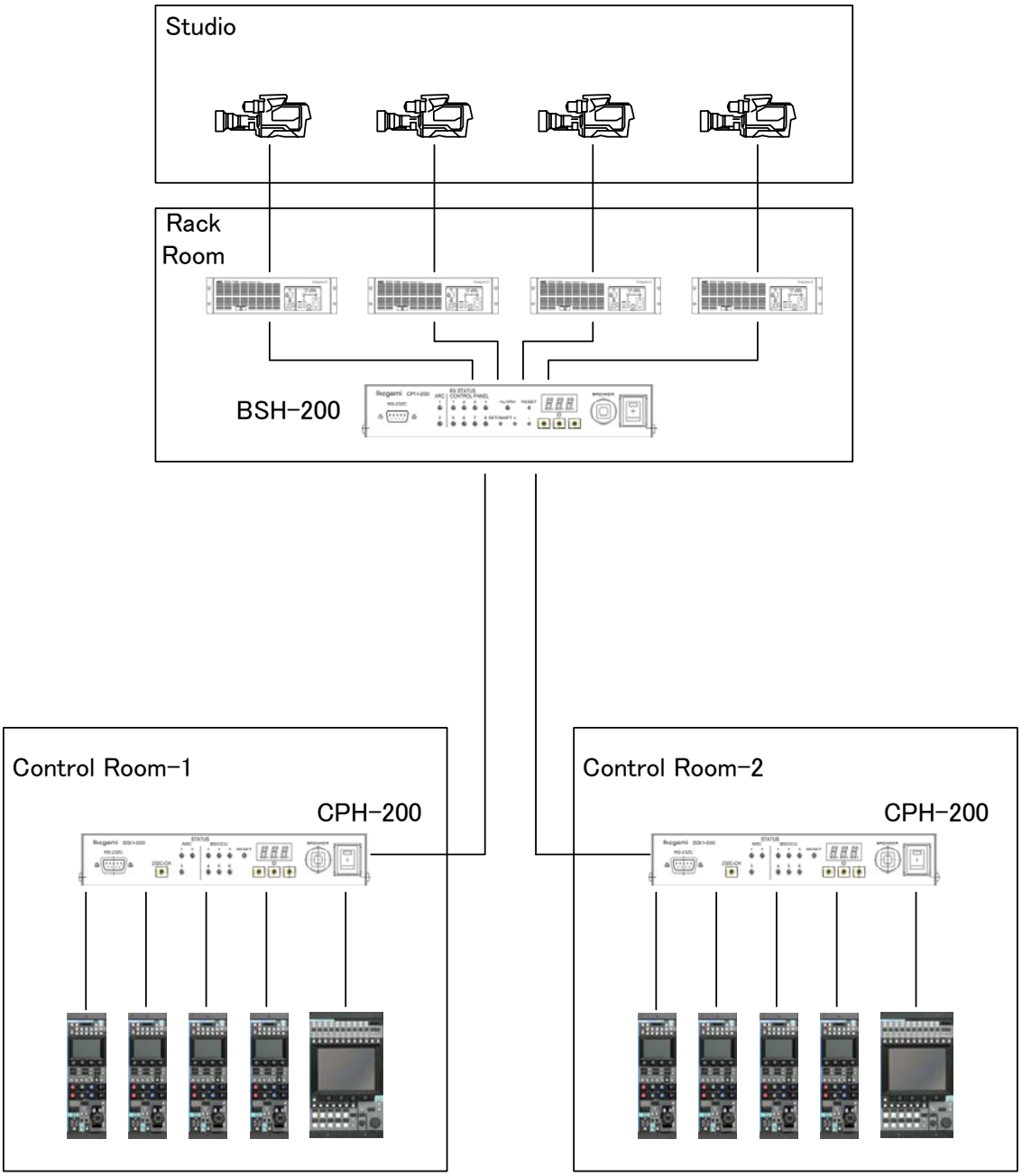
OCP-200 features Network Operation. Concept and Setup Procedure for Network Operation. are described in this summary

## 3.1 Concept image of Network

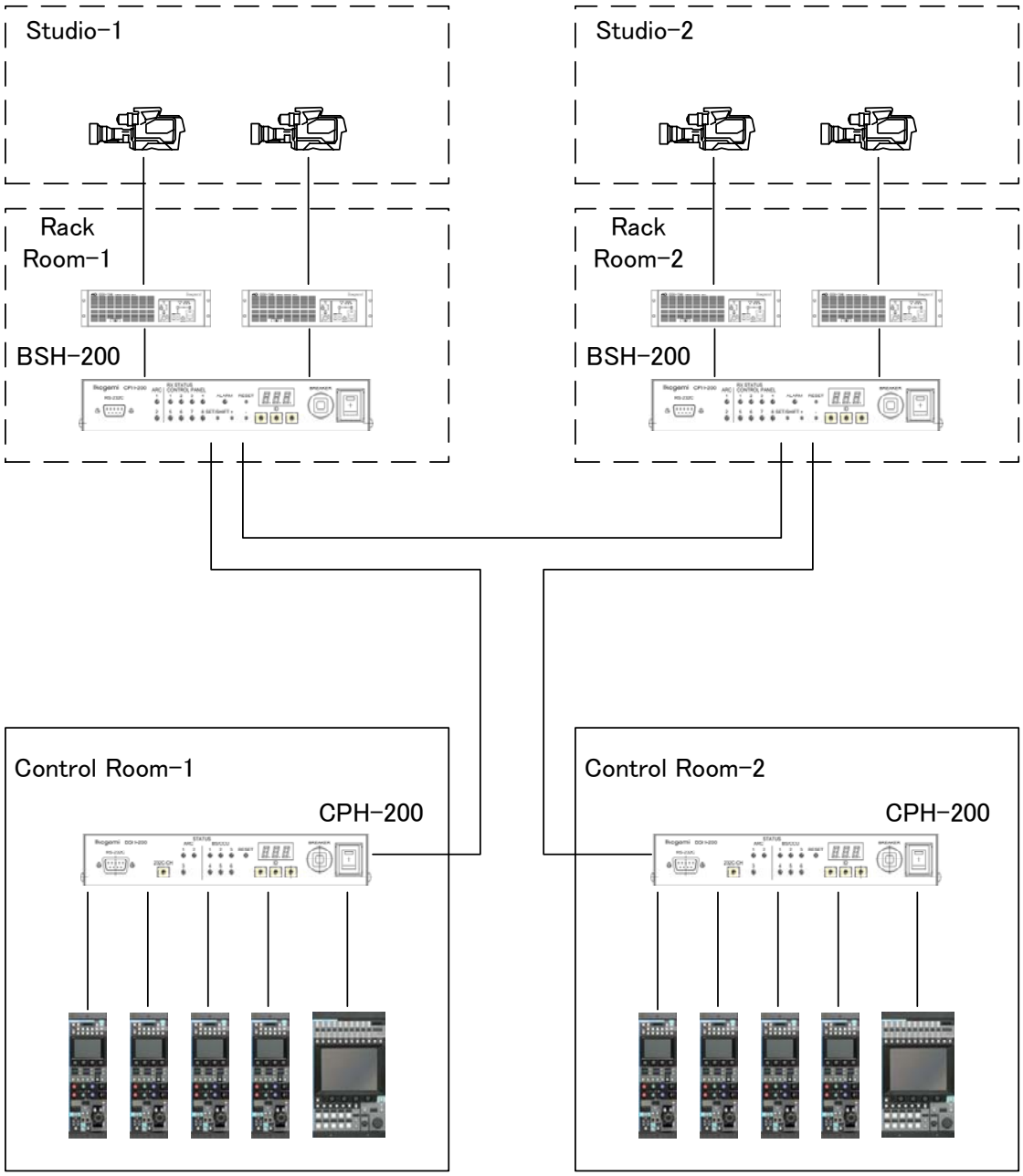


## 3.2 Typical System Configuration

### 1) Case for 1 Studio and 2 Control Rooms



**2) Case for 2 Studios and 2 Control Rooms**

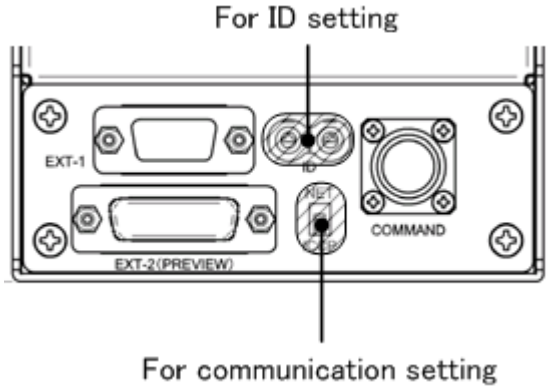


## 3.3 Network ID Setup

Up to 255 Node(Unit) can be connected to 1 network (Node of HUB is excluded from number of Node.). Each Unit(Node) connected to the network should be assigned network . Network ID can be set from 1h to FFh (= 1 to 255 by decimal system).

***CUUTION*** The one ID code can NOT be duplicated in the same network. If the ID code is doubled, it may cause system error to every unit connected to the same network.

### 1) OCP-200 Setup




To set ID with rotary switches located on connector panel of bottom side. In case of network connection, set “NET” of slide switch.

### 2) Other Unit Setup

Refer to operation manual such as “CPH-200/BSH-200 Setup Manual) or others

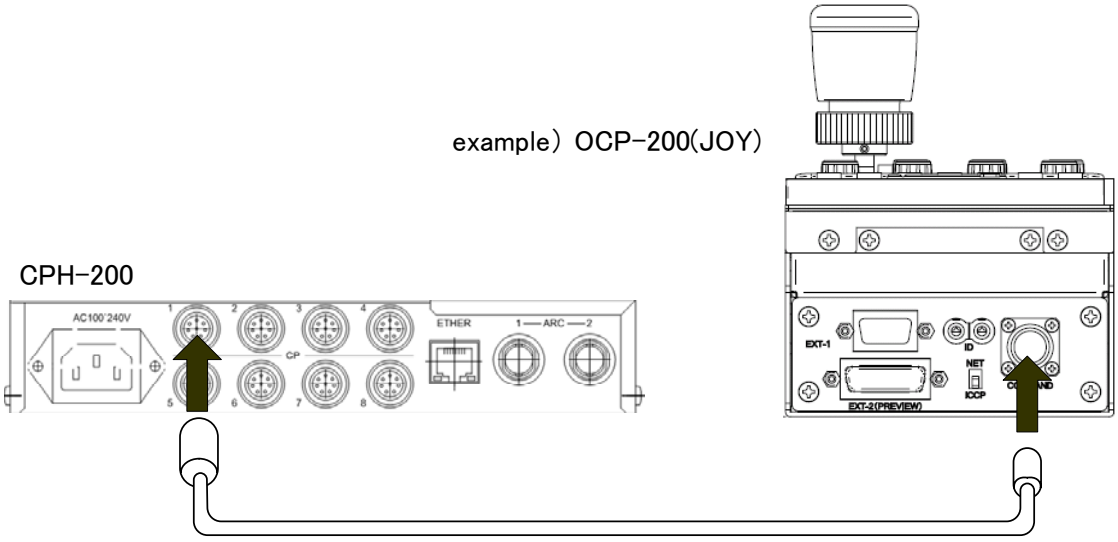
## 3.4 Network Connection

Regarding to network connection, BUS Connection, Star Connection and Tree Connection are available.

***Reference*** Refer to operation manual such as “CPH-200/BSH-200 Setup Manual” or others for the detail of Setup

**・Connection between CPH-200 and network capable Control Panel**

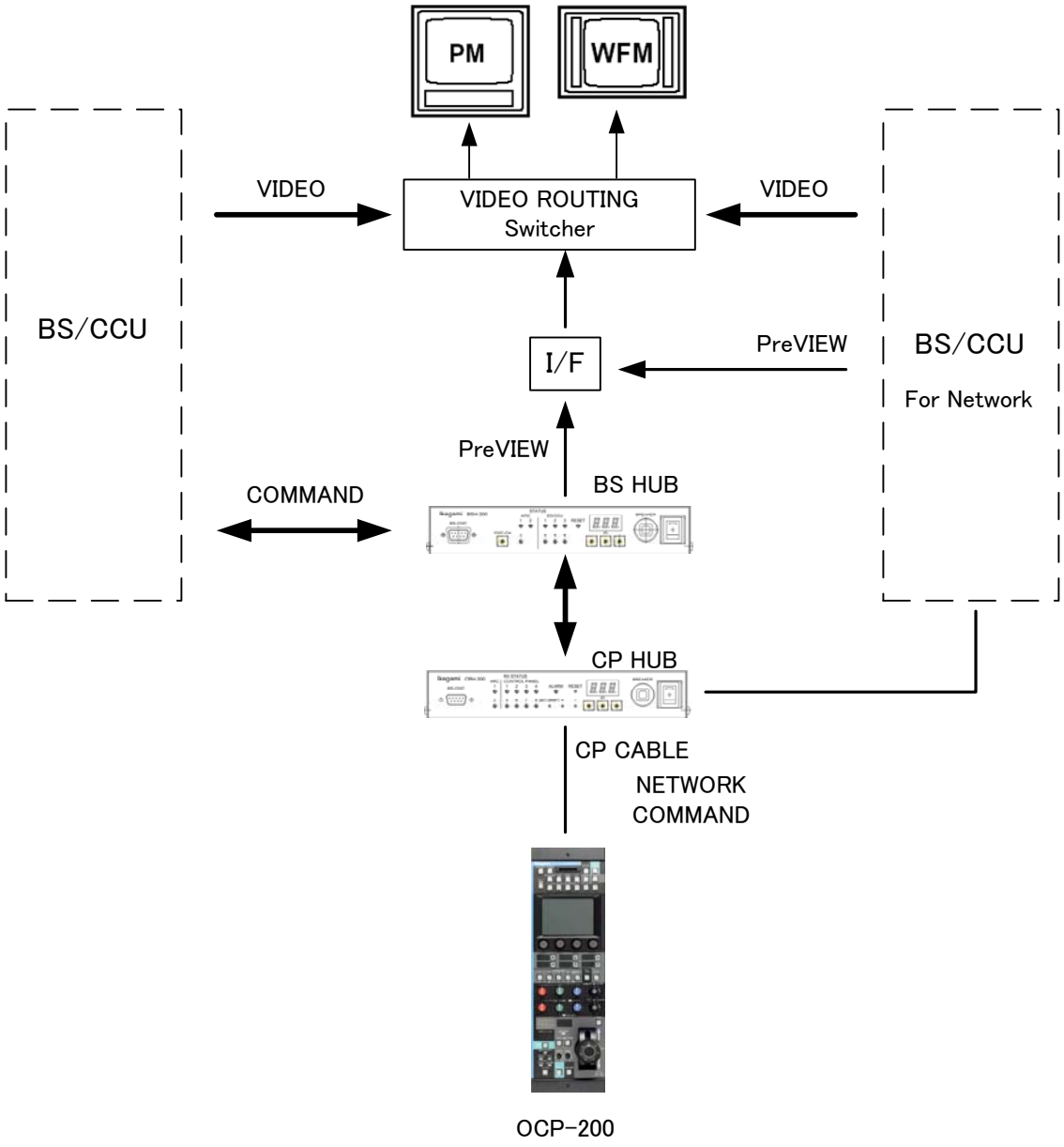
CPH-200 and CPH-200(CPHUB) are connected by Ikegami CP Cable.
CP Cable should be connected to CP Connector of CPH-200 and connected to Command Connector of Control Panel.
Cable length should be from 1m to 50m.



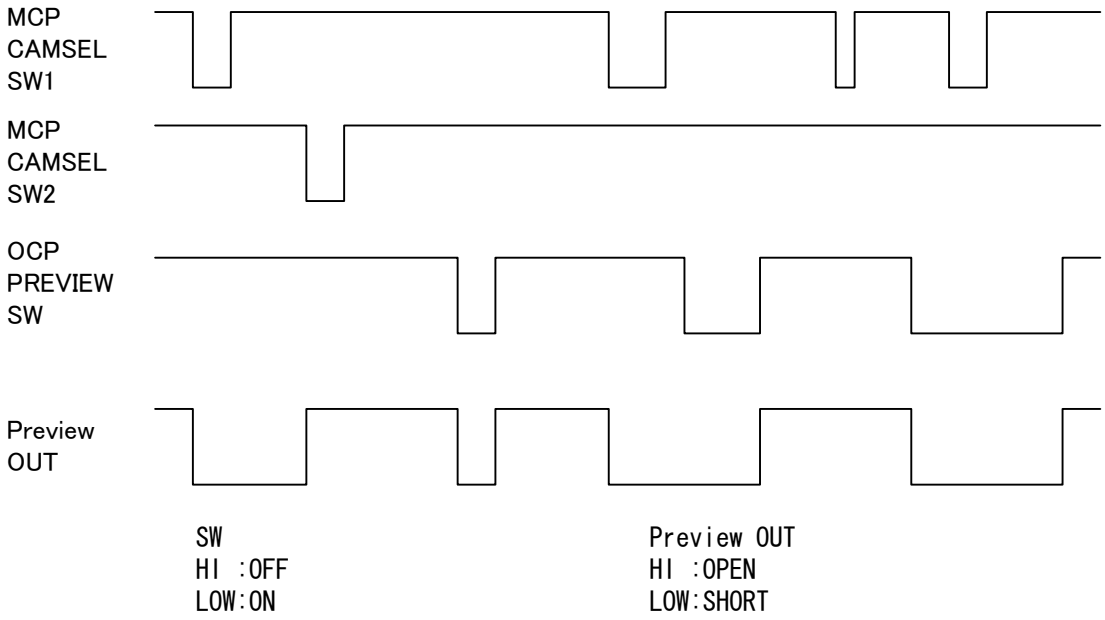
**・Video synchronization**

By using Preview output signal from BS/CCU or BS-HUB which has network control capability, it is possible to synchronize to control with Video Router. Interface conversion may be necessary because of the command difference.

By pressing Preview switch of OCP, Preview signal is output from BS/CCU or BS-HUB which has network command capability. With using this preview signal to control video router, video output synchronized with Preview switch will be available.



Preview signal will be parallel control between Preview switch operation from OCP and Camera Select operation from MCP.
By the control from MCP, Preview turns ON when camera select switch is pressed and truns OFF when the camera select is changed(alternate switching). On the other hand, the control from OCP, Preview is ON while Preview switch is pressing and Preview will be off when Preview switch is released(momentary switching). To use both preview control at the same time, control command will be complex. See following timing chart for command interface designation.




By Panel Config setup of each OCP and MCP, Preview command can be inhibited separately. The setup makes preview output from BS/CCU or BS-HUB can be enabled with both or either of them and disabled with neither OCP nor MCP.

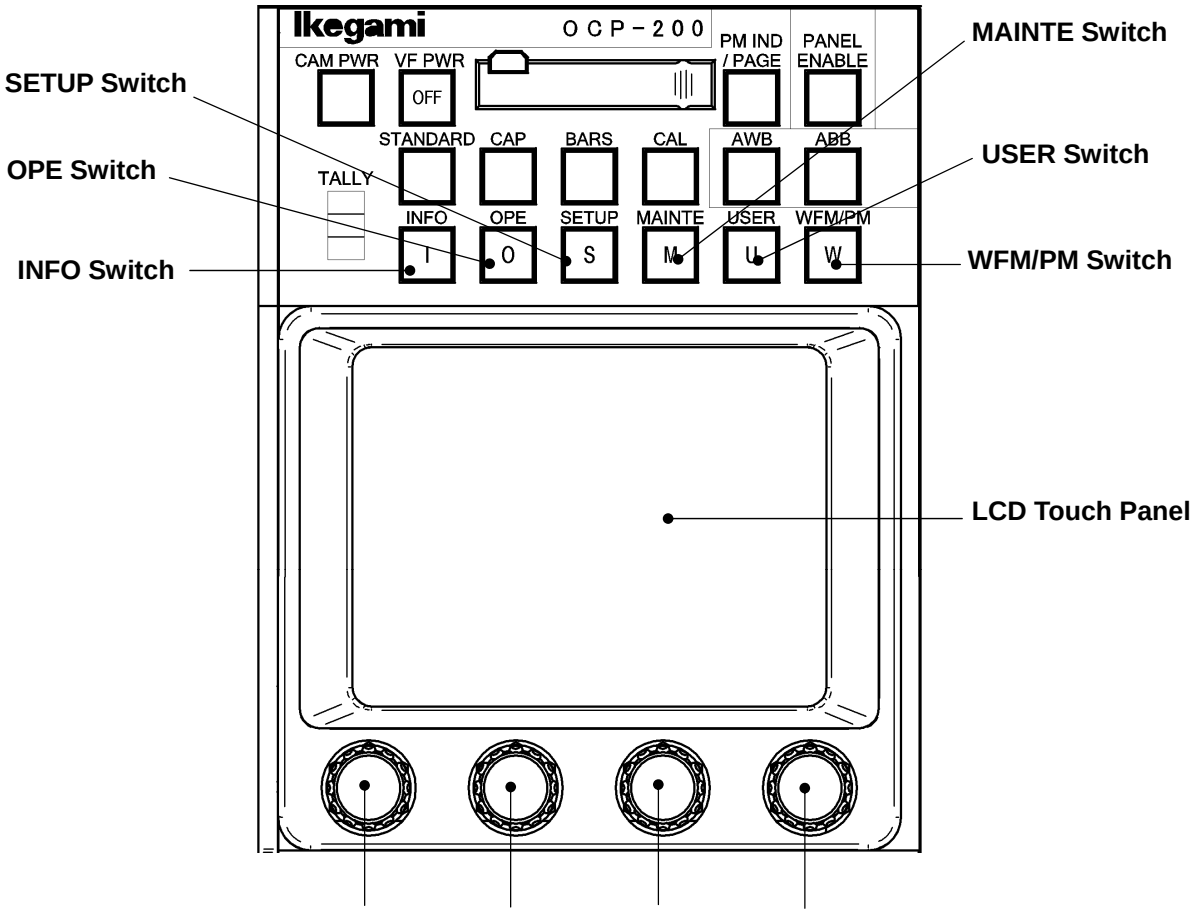
***Reference*** Refer to “18. PANEL SETUP(PANEL CONFIG.)” for detail. And refer to Operation Manual of MCP for the setup of MCP.

# 4. LCD MENU OPERATION

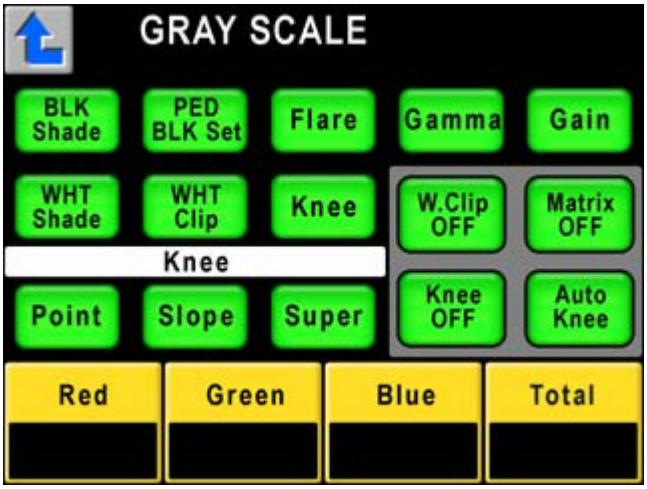
The OCP-200 provides various functions with LCD touch panel, which enable you to confirm the ON/OFF status of the camera functions as well as adjust each functions on the LCD screen by using the Rotary Encoder Knob.

## 4.1 Basic configuration and operation

Operation of LCD screen (menu) is started with Function Switches located on top side of LCD. Those Function Switches are specified by functionality of LCD menu.



- **INFO Switch**
  Indicates information such as setting status of Camera Head or BS/CCU on LCD display.
- **OPE Switch**
  Enables LCD menu to operation mode. This mode covers functionality of existing operation control panel which doesn't employ LCD menu.
- **SETUP Switch**
  Enables LCD menu to setup mode.
- **MAINTE Switch**
  Enables LCD menu to maintenance mode.
- **USER Switch**
  Can be recalled one function to the LCD screen. User can assign one function to this switch and it can be recalled by pressing this switch.
- **WFM/PM Switch**
  Calls WFM (Waveform Monitor)/PM (Picture Monitor) selection switch on LCD display.




Switch icon on LCD and Rotary Encoder Knob function display is classified by color. The color will change automatically by functionality of connected Camera Head and BS/CCU.

| Item | Back ground Color | Condition | |
|---|---|---|---|
| Switch | Amber | Function ON | Active |
| | Green | Function OFF | Stand by |
| | Dark Gray | No Function | |
| Rotary Knob | Amber | Controllable | |
| | Light Gray | Uncontrollable (*) | |

***Note*** Depending on the type or functionality of Camera Head and BS/CCU, Rotary Encoder Knob is active even though icon is amber. On the other hand, Rotary Encoder knob is not active when icon is light gray.

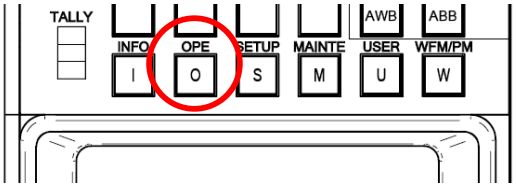
## 4.2 INFO

Indicates status information such as ON/OFF setting condition of Camera Head or BS/CCU on LCD display.

***Reference*** Refer to “10. INFORMATION” for detail.

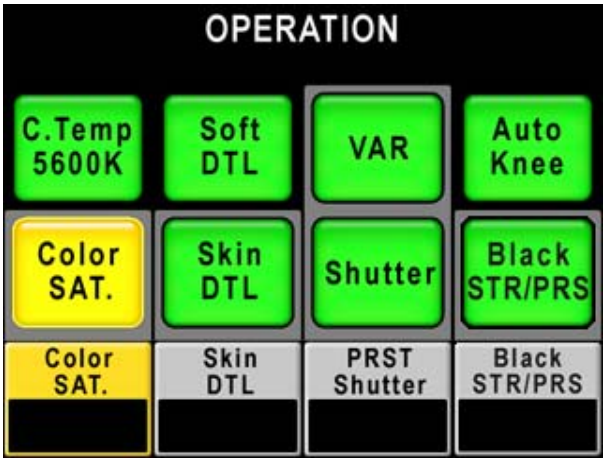
## 4.3 OPE

Push the OPE Switch from the FUNCTION Switches in the upper part of the LCD.




The screen that is appropriate for the operation is displayed on the LCD.
The screen is two-page configuration. The page can be changed with the switch on the right of the screen.

### 1) PAGE 1




**C.Temp 5600K**
Used to select ON/OFF the electric color correction filter of 5600K.

**Color SAT.**
Used to select ON/OFF the color saturation control.
When Color SAT is ON, the Rotary Encoder Knob #1 is used to adjust the level and the value is displayed on the box.

**Soft DTL**
Used to select ON/OFF the Soft DTL.

**Skin DTL**
Used to select ON/OFF the Skin DTL.
When Skin DTL is ON, the Rotary Encoder Knob #2 is used to adjust the level and the value is displayed on the box.

**VAR**

Used to change between Preset Shutter Mode and Variable Shutter Mode.

**Shutter**

Used to select ON/OFF the Electrical Shutter.

When ON, Knob #3 is used to adjust the shutter speed and the value is displayed on the box.

**Auto Knee**

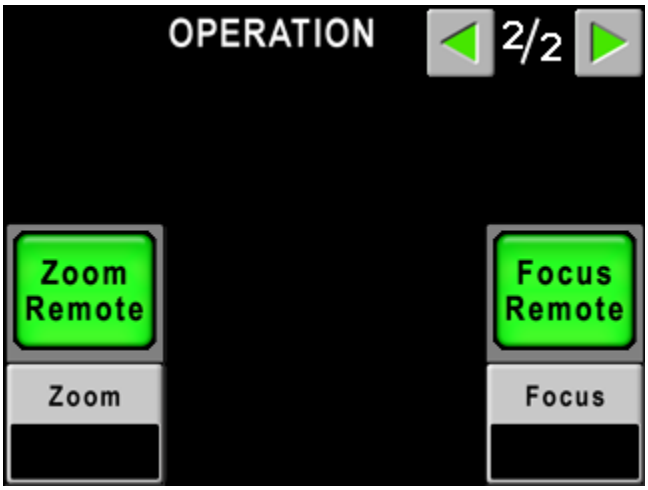
Used to select ON/OFF the Auto Knee correction Mode.

**Black STR/PRS**

Used to select ON/OFF the Black Stretch/Press function.

When ON, the Rotary Encoder Knob #4 is used to select the mode and the selected mode is displayed on the box.

**2) PAGE 2**




- Zoom Remote

  For the serial data control lens, zoom remote control can be set ON/OFF.

  When it is set ON, zoom can be controlled by Rotary Encoder #1.

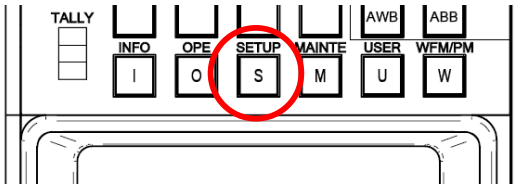
- Focus Remote

  For the serial data control lens, focus remote control can be set ON/OFF.

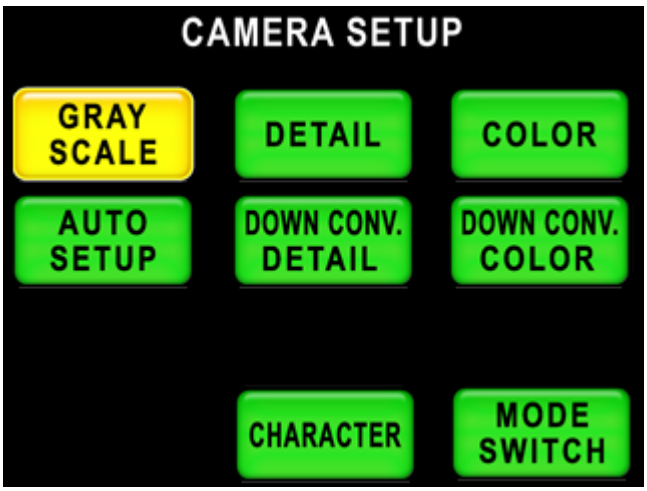
  When it is set ON, focus can be controlled by Rotary Encoder #4.

## 4.4 SETUP

Push the SETUP Switch from the FUNCTION Switches in the upper part of the LCD.

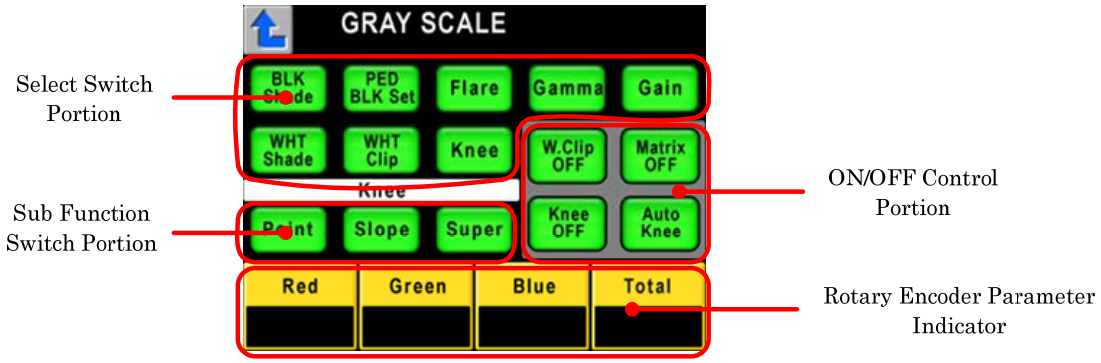



The following screen menu is shown.




### 1) Gary Scale (Camera Setup)

When GRAY SCALE icon is pressed, the following screen is displayed.




Press  to return previous page.

When one of BLK Shade, PED BLK Set, Flare, Gamma, Gain, WHT Shade, WHT Clip, Knee is pressed, the adjusting item is shown on the white highlighted bar. Under the white bar the select switch and control data (+100% to -100%) is displayed. Also ON/OFF switch related the adjusting item is displayed on the right of the white bar. To adjust values with Rotary Encoder Knob #1, #2, #3, and #4.
Control data are displayed with numeral value of percentage from -100 to +100 except particular item (at Normal Display Mode).

And also, the deviation value from the preset value (or value adjusted automatically by the Auto Setup) registered by the Manual Set by setup can be displayed (at Offset Display Mode). At this mode, it can be adjusted how much from the preset value registered by Manual Set, or it can be checked at a glance. When the value is "0", it is preset default status. The number is white at normal display mode, and a number is blue at offset display mode.

***Reference*** Refer to "8.2 Display of offset control data"

GRAY SCALE (CAMERA SETUP) 1/2

| Description | Sub-description | ON/OFF, Function | Control subject |
|---|---|---|---|
| BLK Shade | Red | H Saw/H para/V Saw/V para | Black Shading Adjustment |
| | | Matrix OFF | Matrix ON/OFF |
| | | B.Shade OFF | Black Shading ON/OFF |
| | | W.Shade OFF | White Shading ON/OFF |
| | Green | H Saw/H para/V Saw/V para | Black Shading Adjustment |
| | | Matrix OFF | Matrix ON/OFF |
| | | B.Shade OFF | Black Shading ON/OFF |
| | | W.Shade OFF | White Shading ON/OFF |
| | Blue | H Saw/H para/V Saw/V para | Black Shading Adjustment |
| | | Matrix OFF | Matrix ON/OFF |
| | | B.Shade OFF | Black Shading ON/OFF |
| | | W.Shade OFF | White Shading ON/OFF |
| PED / BLK Set | PED | Red/Green/Blue/Master | Pedestal Adjustment |
| | | Flare OFF | Flare ON/OFF |
| | | Matrix OFF | Matrix ON/OFF |
| | | BLK Gamma | Black Gamma ON/OFF |
| | | BLK STR/PRS | Black Stretch/ Press ON/OFF |
| | BLK Set | Red/Green/Blue | Black-set Adjustment |
| | | Gain Wobble | Gain Wobbling ON/OFF |
| Flare | | Red/Green/Blue/Mater | Flare Adjustment |
| | | Flare OFF | Flare ON/OFF |
| | | Matrix OFF | Matrix ON/OFF |
| | | BLK Gamma | Black Gamma ON/OFF |
| | | BLK STR/PRS | Black Stretch/ Press ON/OFF |
| Gamma | Gamma | Red/Green/Blue/Mater | Gamma Adjustment |
| | | Flare OFF | Flare ON/OFF |
| | | Matrix OFF | Matrix ON/OFF |
| | | BLK Gamma | Black Gamma ON/OFF |
| | | BLK STR/PRS | Black Stretch/ Press ON/OFF |
| | BLK Gamma | Red/Green/Blue/Mater | Black Gamma Adjustment |
| | | Flare OFF | Flare ON/OFF |
| | | Matrix OFF | Matrix ON/OFF |
| | | BLK Gamma | Black Gamma ON/OFF |
| | | BLK STR/PRS | Black Stretch/ Press ON/OFF |
| | Step Gamma | Step | Step Gamma Select |
| | | Gamma Mode | Gamma Mode Select |
| | | Flare OFF | Flare ON/OFF |
| | | Matrix OFF | Matrix ON/OFF |
| | | BLK Gamma | Black Gamma ON/OFF |
| | | BLK STR/PRS | Black Stretch/ Press ON/OFF |

*Gray shadowed items are controlled by Rotary Encoder Knob.

GRAY SCALE (CAMERA SETUP) 2/2

| Description | Sub-description | ON/OFF, Function | Control subject |
|---|---|---|---|
| Gain | | Red/Green/Blue/Master | Gain Adjustment |
| | | W.Clip OFF | White Clip ON/OFF |
| | | Matrix OFF | Matrix ON/OFF |
| | | Knee OFF | Knee ON/OFF |
| | | DTL OFF | DTL ON/OFF |
| WHT Shade | Red | H Saw/H para/V Saw/V para | White Shading Adjustment |
| | | W.Clip OFF | White Clip ON/OFF |
| | | Matrix OFF | Matrix ON/OFF |
| | | Knee OFF | Knee ON/OFF |
| | | W.Shade OFF | White Shading ON/OFF |
| | Green | H Saw/H para/V Saw/V para | White Shading Adjustment |
| | | W.Clip OFF | White Clip ON/OFF |
| | | Matrix OFF | Matrix ON/OFF |
| | | Knee OFF | Knee ON/OFF |
| | | W.Shade OFF | White Shading ON/OFF |
| | Blue | H Saw/H para/V Saw/V para | White Shading Adjustment |
| | | W.Clip OFF | White Clip ON/OFF |
| | | Matrix OFF | Matrix ON/OFF |
| | | Knee OFF | Knee ON/OFF |
| | | W.Shade OFF | White Shading ON/OFF |
| WHT Clip | | Red/Green/Blue | White Clip Adjustment |
| | | W.Clip OFF | White Clip ON/OFF |
| | | Matrix OFF | Matrix ON/OFF |
| | | Knee OFF | Knee ON/OFF |
| | | Auto Knee | Auto Knee ON/OFF |
| Knee | Point | Red/Green/Blue/Total | Knee Point Adjustment |
| | | W.Clip OFF | White Clip ON/OFF |
| | | Matrix OFF | Matrix ON/OFF |
| | | Knee OFF | Knee ON/OFF |
| | | Auto Knee | Auto Knee ON/OFF |
| | Slope | Red/Green/Blue/Total | Knee Slope Adjustment |
| | | W.Clip OFF | White Clip ON/OFF |
| | | Matrix OFF | Matrix ON/OFF |
| | | Knee OFF | Knee ON/OFF |
| | | Auto Knee | Auto Knee ON/OFF |
| | Others | Smooth Knee | Smooth Knee Select |
| | | Super Knee | Super Knee Select |
| | | W.Clip OFF | White Clip ON/OFF |
| | | Matrix OFF | Matrix ON/OFF |
| | | Knee OFF | Knee ON/OFF |
| | | Auto Knee | Auto Knee ON/OFF |

*Gray shadowed items are controlled by Rotary Encoder Knob.

### 2) DETAIL/DOWN CONV.DETAIL (CAMERA SETUP)

By pushing DETAIL switch or DOWN CONV. DETAIL switch, it will activate below functions. Basic operation procedure is the same as that of GLAY SCALE. DOWN CONV. DETAIL switch will be activated with the Camera Head or BS/CCU of which employs down converter.

DETAIL/DOWN CONV. DETAIL (CAMERA SETUP) 1/2

| Description | Sub-description | Description | Sub-description |
|---|---|---|---|
| DTL 1 | | Gain | DTL Gain Adjustment |
| | | FREQ. | DTL Boost Frequency Adjustment |
| | | B/W | DTL Black–White Balance Adjustment |
| | | Balance | DTL Balance Adjustment |
| | | Diagonal DTL | Diagonal DTL ON/OFF |
| | | DTL OFF | DTL ON/OFF |
| DTL 2 | | Thresh | DTL Thresh Adjustment |
| | | Fine | Fine DTL Adjustment |
| | | Noise SUP. | Noise Suppress Adjustment |
| | | Z.TrackGain | Zoom Tracking DTL Gain Adjustment |
| | | Zoom Track | Zoom Tracking DTL ON/OFF |
| | | DTL OFF | DTL ON/OFF |
| Soft | | WHT SUP. | White Suppress Adjustment |
| | | BLK SUP. | Black Suppress Adjustment |
| | | DTL OFF | DTL ON/OFF |
| | | Soft DTL | Soft DTL ON/OFF |
| Skin | Gain | Gain | Skin DTL Gain Adjustment |
| | | R Hue | Rch Hue Adjustment |
| | | B Hue | Bch Hue Adjustment |
| | | Z. Track Gain | Zoom Tracking DTL Adjustment |
| | | Zebra IND. | Zebra Indicator ON/OFF |
| | | Zoom Track | Zoom Tracking DTL ON/OFF |
| | | DTL OFF | DTL ON/OFF |
| | | Skin DTL | Skin DTL ON/OFF |
| | Skin Hue | Hue Marker | Hue Marker ON/OFF |
| | | AHD Start | AHD Start |
| | | DTL OFF | DTL ON/OFF |
| | | Skin DTL | Skin DTL ON/OFF |

*Gray shadowed items are controlled by Rotary Encoder Knob.

DETAIL/DOWN CONV. DETAIL (CAMERA SETUP) 2/2

| Description | Sub-description | Description | Sub-description |
|---|---|---|---|
| Color | Level | Gain | Color DTL Adjustment |
| | | DTL OFF | DTL ON/OFF |
| | | Color DTL | Color DTL ON/OFF |
| | Object Clip | Size | Hue Marker Size Adjustment |
| | | H POS. | Hue Marker H Phase Adjustment |
| | | V POS. | Hue Marker V Phase Adjustment |
| | | Hue Marker | Hue Marker ON/OFF |
| | | AHD Start | AHD Start |
| | | DTL OFF | DTL ON/OFF |
| | | Color DTL | Color DTL ON/OFF |
| | Clip ADJ. | Phase | Hue Phase Adjustment (Coarse) |
| | | Fine | Hue Phase Adjustment (Fine) |
| | | Width1 | Hue Width 1 Adjustment |
| | | Width2 | Hue Width 2 Adjustment |
| | | Key INV. | Key Invert |
| | | Zebra IND. | Zebra Indicator ON/OFF |
| | | DTL OFF | DTL ON/OFF |
| | | Color DTL | Color DTL ON/OFF |
| HI-Light | | Gain | HI-Light DTL Gain Adjustment |
| | | Limit | HI-Light DTL Limit |
| | | DTL OFF | DTL ON/OFF |
| | | HI-Light DTL | HI-Light DTL ON/OFF |

*Gray shadowed items are controlled by Rotary Encoder Knob.

### 3) COLOR/DOWN CONV.COLOR (CAMERA SETUP)

By pushing DETAIL switch or DOWN CONV. DETAIL switch, it will activate below functions. Basic operation procedure is the same as that of GLAY SCALE. DOWN CONV. DETAIL switch will be activated with the Camera Head or BS/CCU of which employs down converter.

And Custom Color 1, Custom Color 2 and Color CORR will be activated when Color is selected.

COLOR (Setup) 1/2

| Description | Sub-description | Description | Sub-description |
|---|---|---|---|
| Matrix | Red | R-G | R-G Adjustment |
| | | R-B | R-B Adjustment |
| | | Matrix Select | Matrix Select |
| | | Matrix OFF | Matrix ON/OFF |
| | Green | G-R | G-R Adjustment |
| | | G-B | G-B Adjustment |
| | | Matrix Select | Matrix Select |
| | | Matrix OFF | Matrix ON/OFF |
| | Blue | B-R | B-R Adjustment |
| | | B-G | B-G Adjustment |
| | | Matrix Select | Matrix Select |
| | | Matrix OFF | Matrix ON/OFF |
| Color SAT. | | Color SAT. | Color Saturation Adjustment |
| | | Chroma OFF | Chroma ON/OFF |
| | | Color SAT. ON/OFF | Color Saturation ON/OFF |
| Custom Color 1 | Color | Hue | Hue Adjustment |
| | | SAT. | Saturation Adjustment |
| | | Value | Value Adjustment |
| | | DTL | DTL Adjustment |
| | | DTL OFF | DTL ON/OFF |
| | | CSTM Color 1 | Custom Color 1 ON/OFF |
| | Object Clip | Size | Hue Size Adjustment |
| | | H POS. | Hue H Position Adjustment |
| | | V POS. | Hue V Position Adjustment |
| | | Hue Marker | Hue Marker ON/OFF |
| | | AHD Start | AHD Start |
| | | CSTM Color 1 | Custom Color 1 ON/OFF |
| | Clip ADJ. | Phase | Color Phase Adjustment (Coarse) |
| | | Fine | Color Phase Adjustment (Fine) |
| | | Width1 | Width 1 Adjustment |
| | | Width2 | Width 2 Adjustment |
| | | Key INV. | Key Invert |
| | | Zebra IND. | Zebra Indicator ON/OFF |
| | | CSTM Color 1 | Custom Color 1 ON/OFF |

*Gray shadowed items are controlled by Rotary Encoder Knob.

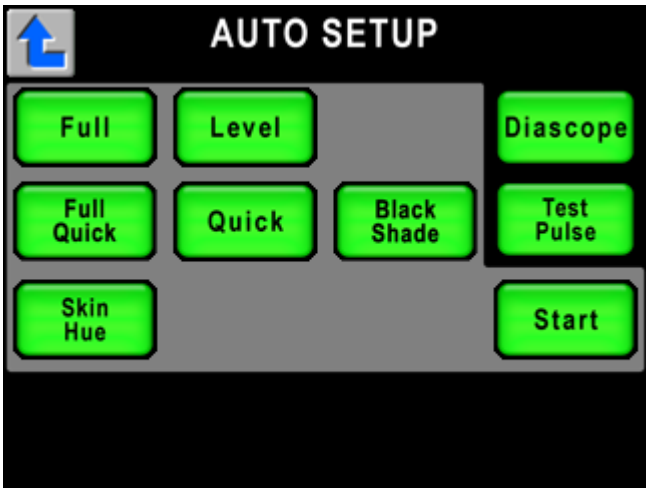
COLOR (Setup) 2/2

| Description | Sub-description | Description | Sub-description |
|---|---|---|---|
| Custom Color 2 | Color | Hue | Hue Adjustment |
| | | SAT. | Saturation Adjustment |
| | | Value | Value Adjustment |
| | | DTL | DTL Adjustment |
| | | DTL OFF | DTL ON/OFF |
| | | CSTM Color 2 | Custom Color 2 ON/OFF |
| | Object Clip | Size | Size Adjustment |
| | | H POS. | H Phase Adjustment |
| | | V POS. | V Phase Adjustment |
| | | Hue Marker | Hue Marker ON/OFF |
| | | AHD Start | AHD Start |
| | | CSTM Color 2 | Custom Color 2 ON/OFF |
| | Clip ADJ. | Phase | Color Phase Adjustment (Coarse) |
| | | Fine | Color Phase Adjustment (Fine) |
| | | Width1 | Width 1 Adjustment |
| | | Width2 | Width 2 Adjustment |
| | | Key INV. | Key Invert |
| | | Zebra IND. | Zebra Indicator ON/OFF |
| | | CSTM Color 2 | Custom Color 2 ON/OFF |
| Color CORR. | R / Yl | R Hue | Red Hue Adjustment |
| | | R SAT. | Red Saturation Adjustment |
| | | Yl Hue | Yellow Hue Adjustment |
| | | Yl SAT. | Yellow Saturation Adjustment |
| | | Color CORR. | Color Corrector ON/OFF |
| | G / Cy | G Hue | Green Hue Adjustment |
| | | G SAT. | Green Saturation Adjustment |
| | | Cy Hue | Cyan Hue Adjustment |
| | | Cy SAT. | Cyan Saturation Adjustment |
| | | Color CORR. | Color Corrector ON/OFF |
| | B / Mg | B Hue | Blue Hue Adjustment |
| | | B SAT. | Blue Saturation Adjustment |
| | | Mg Hue | Magenta Hue Adjustment |
| | | Mg SAT. | Magenta Saturation Adjustment |
| | | Color CORR. | Color Corrector ON/OFF |

*Gray shadowed items are controlled by Rotary Encoder Knob.

### 4) AUTO SETUP (CAMERA SETUP)

By pressing AUTO SETUP switch, Auto Setup menu will come up.




- **Full (Full Auto Setup)**
  All of Auto Setup item are executed and camera setting is initialized. Full Auto Setup may be used mainly for maintenance purpose.
- **Level (Level Auto Setup)**
  Auto setup for the video level. This may be used for daily setup.
- **Full Quick (Full Quick Auto Setup)**
  Full Quick Auto Setup function doesn't use Auto Setup Chart but internal electric signals. Setup can be done when chart is not available. It will take longer time for setup comparing with Quick Auto Setup because larger numbers of control item are executed.
- **Quick (Quick Auto Setup)**
  Quick Auto Setup function doesn't use Auto Setup Chart but internal electric signals. Setup can be done when chart is not available.
- **Black Shade (Auto Black Shade)**
  Auto Setup function for Black Shade.
- **Skin Hue (Auto Hue Detect)**
  To sense HUE automatically for SKIN DTL function.

Select the item by switch icon and press "Start" icon to execution. Set "Test Pulse" or "Diascope" ON/OFF occasionally.
If Auto Setup was incomplete, Start switch will blink for alert. By pressing Start icon to cancel error condition. Or pressing Start icon on execution to stop Auto Setup procedure.
Quick Auto Setup is executable by pushing the AWB switch long. Auto Black Shade can be executed by pushing the ABB switch long.

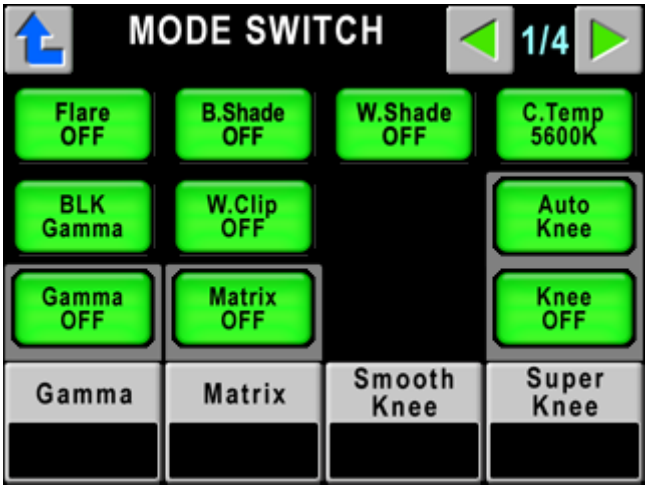
***Note*** Color DETAIL and Auto Hue Detect function in Custom Color 1/2 can be set with each control page.
In BS/CCU of an old type, a display different on the execution screen on PM at Full Quick Auto Setup might be done.

***Reference*** Refer to Operation Manual for each cameras for the detail of Auto Setup function.

### 5) MODE SWITCH (CAMERA SETUP)

By pressing MODE SWITCH, ON/OFF for Camera Head or the CCU/BS functions of which BS/CCU has control function can be selected. The screen is divided into 4 pages by function or item. The page can be changed with the ◀ ▶ switch on the right of the screen.

It is possible to return to the CAMERA SETUP screen with the ↑ switch.




***Note*** In case that the menu page is transited from INFORMATION page to this MODE SWITCH page by direct jump function, by the switch of ↑, it can be back to INFORMATION page. By pressing ◀ ▶ to page change, it will be back to CAMERA SETUP page.

***Reference*** Refer to “10.2 Direct jump function” for detail of direct jump from INFORMATION page.

MODE SWITCH (Setup)

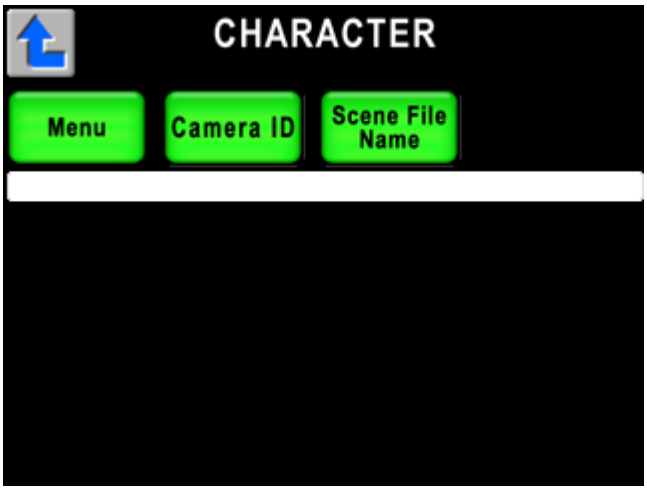
| Page | ON/OFF, Function | Control subject |
|---|---|---|
| Page1 | Flare OFF | Flare ON/OFF |
| | Gamma OFF | Gamma ON/OFF |
| | BLK Gamma | Black gamma ON/OFF |
| | B.Shade OFF | Black Shading ON/OFF |
| | W.Shade OFF | White Shading ON/OFF |
| | W.Clip OFF | White clip ON/OFF |
| | Matrix OFF | Matrix ON/OFF |
| | C.Temp 5600K | Electric color correction filter 5600K ON/OFF |
| | Knee OFF | Knee ON/OFF |
| | Auto Knee | Auto knee ON/OFF |
| | Gamma | Gamma selection |
| | Matrix | Matrix selection |
| | Smooth Knee | Smooth knee selection |
| | Super Knee | Super knee selection |
| Page2 | DTL OFF | Detail ON/OFF |
| | Soft DTL | Soft detail ON/OFF |
| | Skin DTL | Skin detail ON/OFF |
| | Slim DTL | Slim detail ON/OFF |
| | Diagonal DTL | Diagonal detail ON/OFF |
| | Z.Track DTL | Zoom track detail ON/OFF |
| | Z.Track Skin | Zoom track skin detail ON/OFF |
| | Color DTL | Color detail ON/OFF |
| | Hi-Light DTL | Highlight detail ON/OFF |
| Page3 | Color SAT. | Color saturation ON/OFF |
| | Chroma OFF | Chroma ON/OFF |
| | Color CORR. | Color corrector ON/OFF |
| | C.Temp 5600K | Electric color correction filter 5600K ON/OFF |
| | CSTM Color 1 | Custom color 1 ON/OFF |
| | CSTM Color 2 | Custom color 2 ON/OFF |
| | Matrix OFF | Matrix ON/OFF |
| | AWB CH | AWB slection |
| | Matrix Select | Matrix selection |
| Page4 | Diascope | Diascope ON/OFF |
| | Test Pulse | Test Pulse ON/OFF |
| | Super V | Super V ON/OFF |
| | Shutter | Electronic shutter ON/OFF |
| | VAR. | Variable shutter ON/OFF |
| | Black STR/PRS | Black Stretch/ Press ON/OFF |
| | Zoom Remote | Zoom Remote ON/OFF |
| | Focus Remote | Focus Remote ON/OFF |
| | Lens File No. | Lens File No. selection |
| | Super V | Super V selection |
| | Shutter | Electronic shutter speed selection |
| | Black STR/PRS | Black Stretch/ Press selection |

*Gray shadowed items are controlled by Rotary Encoder Knob.

### 6) CHARACTER（CAMERA SETUP）

By pressing CHARACTER Switch, below four items can be setup;

- **Camera Menu**
- **BARS TITLE**
- **Camera ID**
- **Scene File Name**

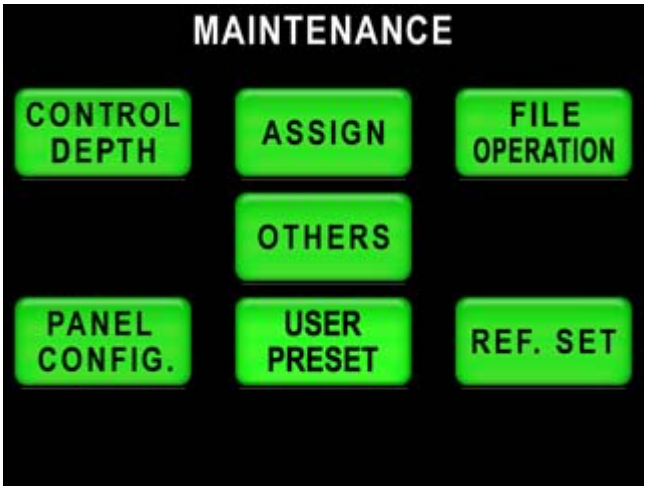



***Reference*** Refer to “14. CHARACTER SETUP” for detail.

## 4.5 MAINTE

Push the MAINTE Switch from the FUNCTION Switches in the upper part of the LCD.

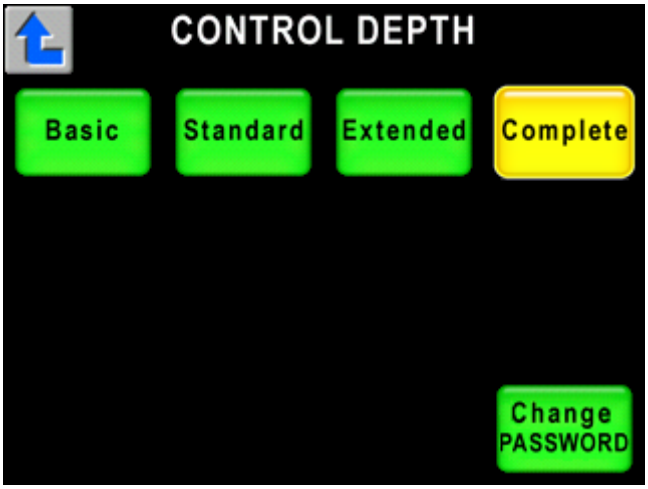

LCD menu below will come up.




Various operations can be done by pushing each switch.

### 1) CONTROL DEPTH（MAINTENANCE）

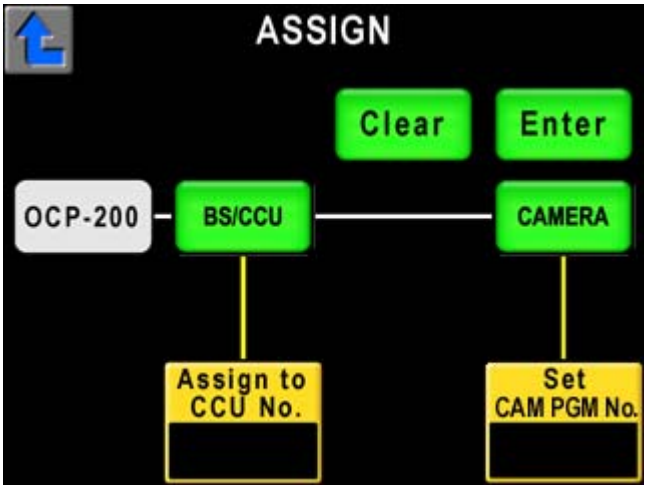
OCP-200 can beset control depth of functionality. Control depth can be protected by password.




***Reference*** Refer to “12. CONTROL DEPTH SETTING” for detail.

### 2) ASSIGN (MAINTENANCE)

The program number for the camera in the program operation can be set.
Moreover, when the network is connected, the number of connected BS/CCU can be set.

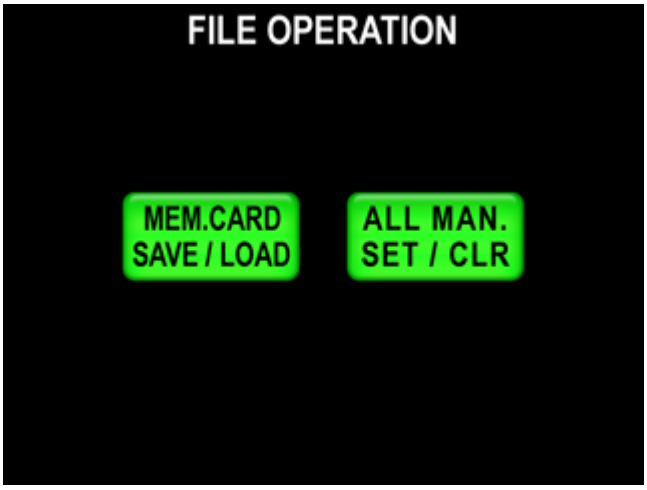



***Reference*** Refer to “11. SETTING OF PANEL ASSIGN AND PROGRAM NUMBER” for detail

### 3) FILE OPARATION (MAINTENANCE)

FILE OPARATION includes following two functions;

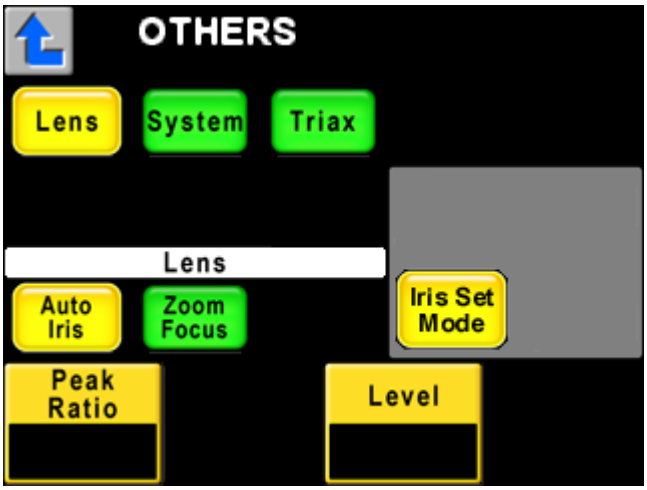
- MEM.CARD SAVE/LOAD
- ALL MAN.SET/CLR




***Reference*** Refer to “9. MEMORY CARD OPERATION” for detail of MEM.CARD SAVE/LOAD, and refer to ”8.4 All Manual Set / All Manual Clear” for detail for MAN.SET/CLR.

### 4) OTHERS (MAINTENANCE)

Includes control item which not be used frequently.



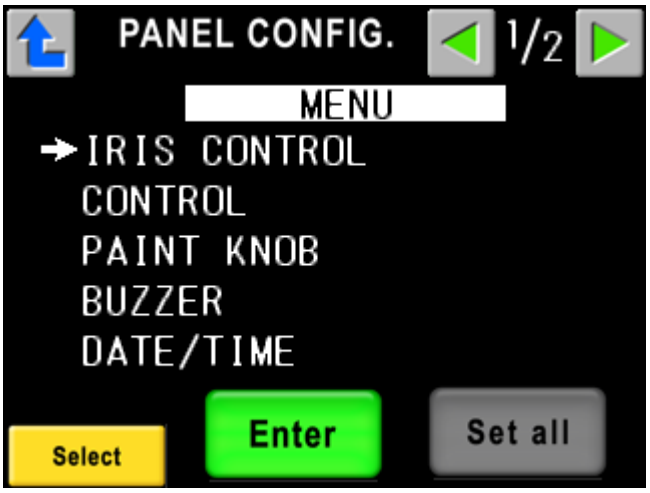

OTHERS（MAINENANCE）

| Description | Sub-description | ON/OFF, Function | Control Subject |
|---|---|---|---|
| Lens | Auto Iris | Peak Ratio | Peak Ratio |
| | | Level | Iris Level |
| | | Iris SetMode | Iris Set Mode ON/OFF |
| | Zoom Focus | Zoom | Zoom Control |
| | | Focus | Focus Control |
| | | Zoom Remote | Zoom Remote ON/OFF |
| | | Focus Remote | Focus Remote ON/OFF |
| System | GL Phase | SC Coarse | SC Coarse Control |
| | | SC Fine | SC Fine Control |
| | | D.CONV. H Phase | Down Converter H Phase Control |
| | | H Phase | H Phase Control |
| | ENC | Gain | ENC Gain Control |
| | | Chroma | Chroma Control |
| | Aspect Ratio | Mode Select | Aspect Ratio Selection for SDTV |
| Triax | TA Level | Y/Cb/Cr | TA Level Control |
| | | Head Bars | Head Bars ON/OFF |
| | BS Level | Red/Green/Blue | BS Level Control |
| | | Head Bars | Head Bars ON/OFF |
| | BS BLK Set | Red/Green/Blue | BS Black Set Control |
| | | Head Bars | Head Bars ON/OFF |
| HD Triax | TA Level | Y/Pb/Pr | TA Level Control |
| | | Head Bars | Head Bars ON/OFF |
| | BS Black | Y/Pb/Pr | TA Black Control |
| | | Head Bars | Head Bars ON/OFF |

*Gray shadowed items are controlled by Rotary Encoder Knob

### 5) PANEL CONFIG. (MAINTENANCE)

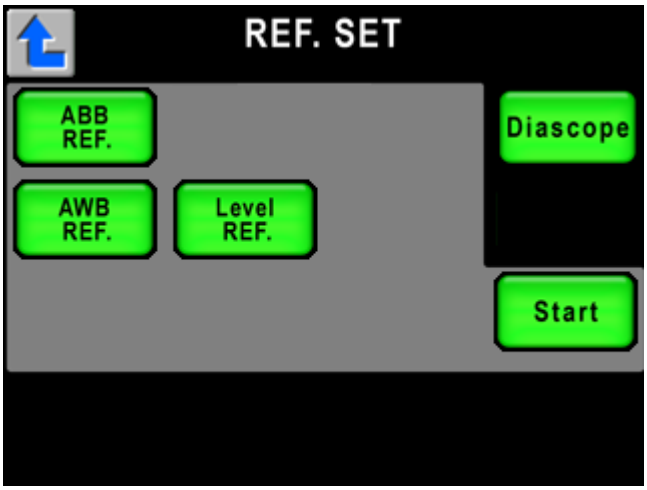
OCP-200 can be setup menu configuration freely by each application or operating condition.




***Reference*** Refer to “18. PANEL SETUP(PANEL CONFIG.)” for detail.

### 6) REF. SET (MAINTENANCE)

To save and overwrite reference file as the convergence value of the camera auto setup.

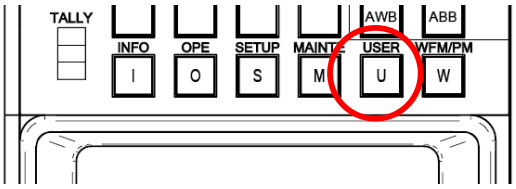



- **Level REF.**
  To create reference data of Auto Setup.
- **ABB REF.**
  To create reference data of PEDESTAL for ABB. This setting is common with reference data of PEDESTAL for Auto Setup.
- **AWB REF.**
  To create reference data of Gain for AWB 時. This setting is separated form reference data for Auto Setup.

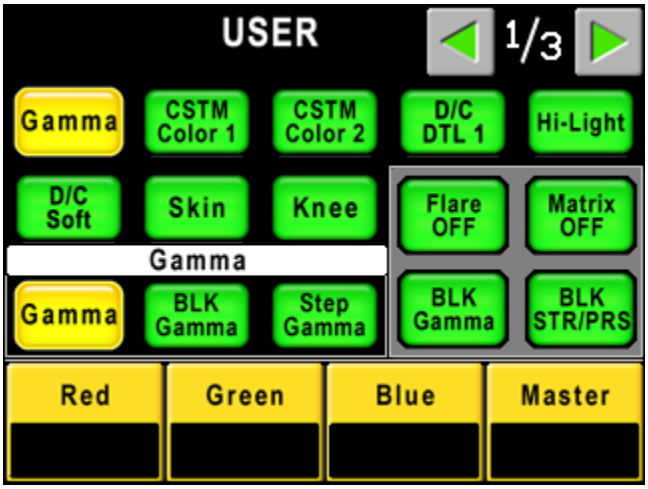
Select the item by switch icon and press and hold Start icon to execution. Set “Diascope” ON/OFF occasionally.
If reference setting was incomplete, Start switch will blink for alert. By pressing Start icon to cancel error condition. Or pressing Start icon on execution to stop reference setting procedure.

## 4.6 USER

Push the USER Switch from the FUNCTION Switches in the upper part of the LCD.



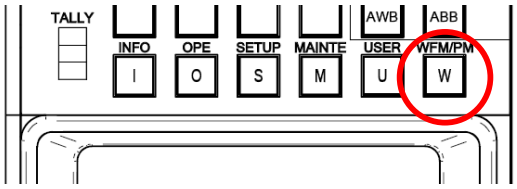

Preset user function page can be recalled.



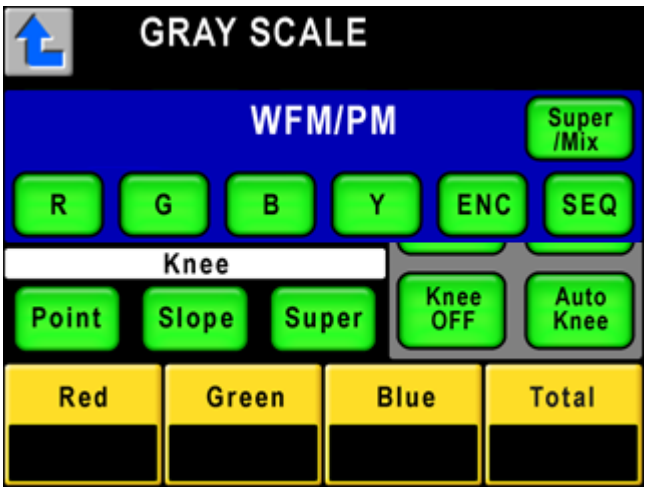

***Reference*** Refer to “15. USER SETTING” for detail.

## 4.7 WFM/PM

Push the WFM/PM Switch from the FUNCTION Switches in the upper part of the LCD.




The WFM/PM SELECT window screen overlaps and it is displayed.




To select the signal for WFM Output or PM Output.
"R", "G", "B", "Y" or "ENC" can be output for WFM Output or PM Output. When "SEQ" is selected, 3 signals of R, G and B are output for WFM Output. PM Output keeps output signal regardless to "SEQ" selection. To display 3 Wave Forms to WFM, it is necessary to connect WFM REMOTE on BS/CCU and WFM.

In case of Super/Mix is set to "ON", selected signal is output for PM and WFM. In case of "OFF", 1ch signal with later Selection priority basis output to PM and WFM. However, this switch will be active when BS/CCU is connected to OCP. It will be "OFF" at the self-contained operation.

# 5. CONTROL KNOB OPERATION

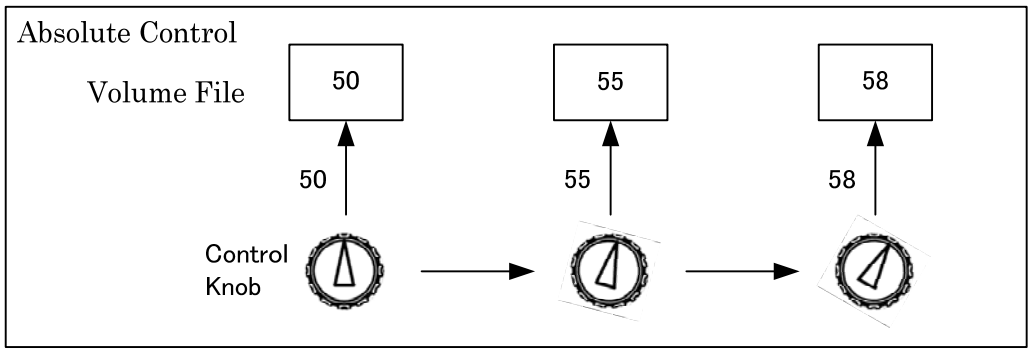
## 5.1 Camera Data Control

There are two control logics, one is Absolute Control and another is Relative Control. (Control items include data control of both Camera Head and BS/CCU, but it will be described as Camera Control by mixing them up.)

### 1) Absolute Control

This control logic is used for traditional Ikegami OCP/RCP and the changed parameter with potentiometer is A/D converted and transmitted. Transmitted data(Absolute Value Data) is reflected to Volume File.

According to rotation angle of Control Knob, Control Data will be determined to transmit. Then Knob rotation and control is synchronized, and it provides better operation feeling .

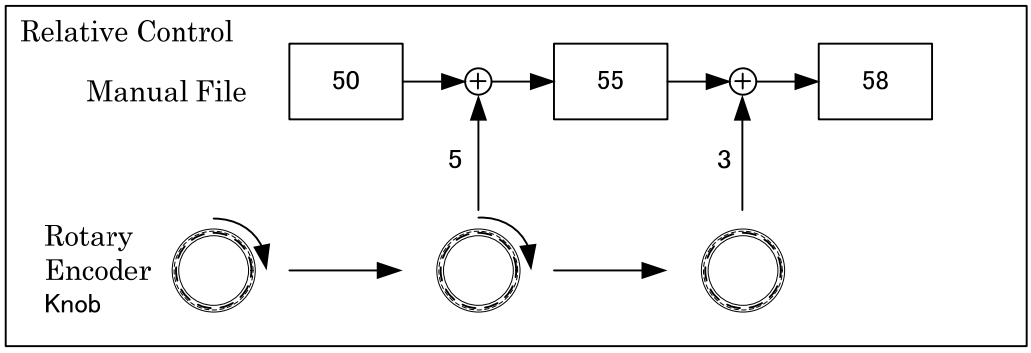



It is impossible for Absolute controlled Control Panel to control multiple cameras at the same time.

### 2) Relative Control

This control method is used for existing MCP, Rotary Pulse is generated by Rotary Encoder Knob operation. CPU counts pulses in one period, the number of pulse is transmitted for the data. Clockwise rotation outputs positive absolute data and counter clockwise rotation outputs negative absolute data.

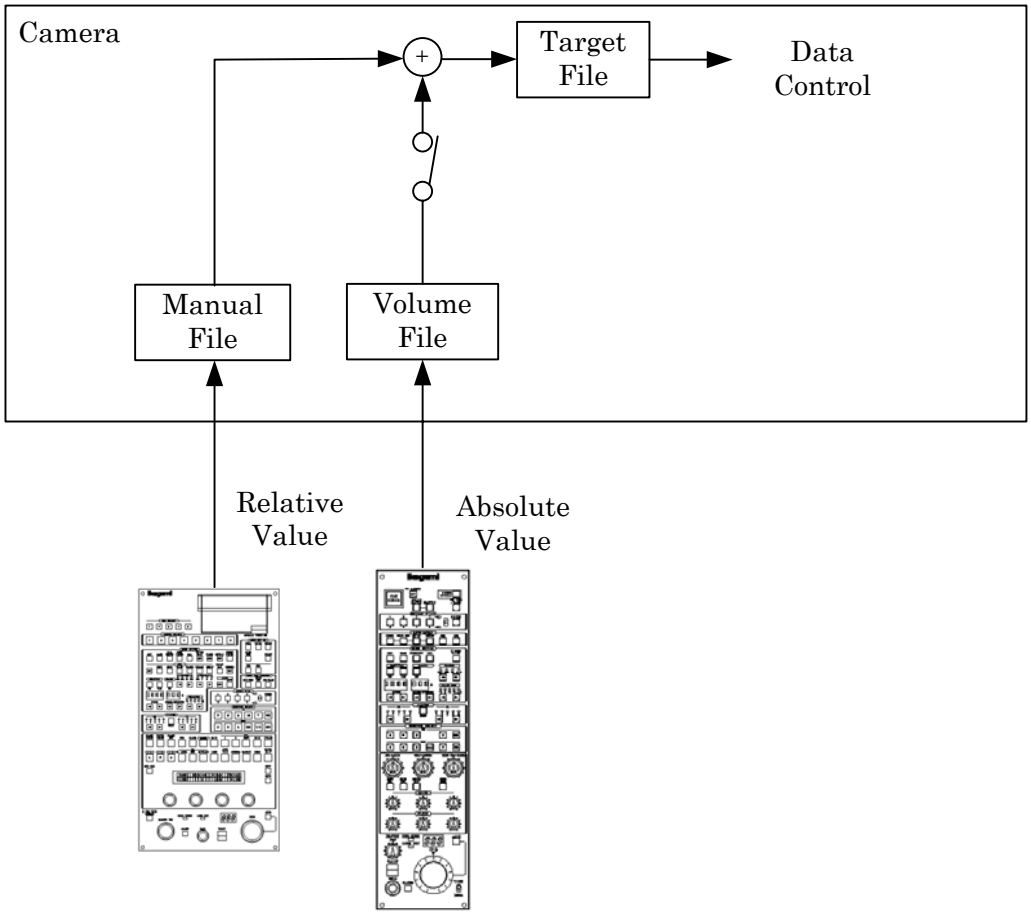
Transmitted Relative Data is added to Manual File of Camera. At the Rotary Encoder Knob rotation, output data value is changed in accordance with rotation speed. Faster rotation is detected as coarse control and data value is increased and slower rotation is detected as fine control and data value is decreased. This change affects to operability.




It is possible for Relative controlled Control Panel to control multiple cameras at the same time.

### 3) Data Processing in Camera

Camera calculates volume file and manual file from relative data and absolute data. Date control of camera head is based on Volume File, Manual File and Target File mixed up with the other files. (There are many files but three of them represents many of files for the convenience of explanation.)



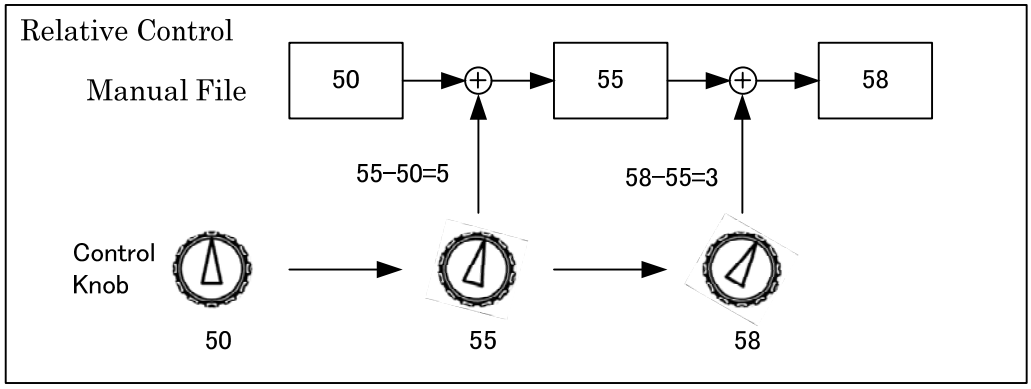

## 4) Merit and Demerit of Absolute Control and Relative Control

Absolute Control and Relative Control has merit and demerit.

| | Merit | Demerit | Purpose |
|---|---|---|---|
| Absolute Control | Control value is determined by volume rotation angle. So control feeling is good. By Rotating to original position, control value is back to original value. | Only one control panel can connect to one camera at the same time. | Suitable for Operation |
| Relative Control | Multiple connections available. Connection change or disconnection doesn't cause camera data jump. Fine adjustment available. | Control feeling is inferior because control value is not reflected from rotation angle. To go back to original value, it is necessary to check actual video or indicated answer on panel. | Suitable for Maintenance |

## 5.2 Control logic of OCP-200

OCP-200 is the control panel combining the both advantages of volume control of traditional OCP and Rotary Encoder control of MCP. It achieves good control feeling of potentiometer and the function to avoid data jump at the panel connection change.
At the Control knob rotation, the control data is A/D converted by one interval. The control value is not transmitted as the absolute value but the difference of control value between before A/D conversion and after A/D conversion. Camera control. But camera reacts as same as controlled by Rotary Encoder Knob.
And Rotary Encoder Knob control with LCD Menu, camera is controlled by relative control value as same as existing MCP.

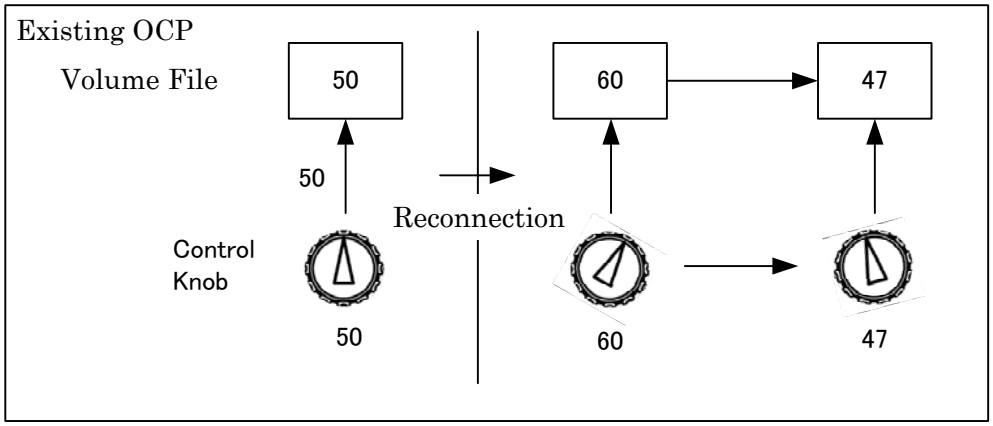



Past “Absolute value iris control” and “Relative value iris control” that is this new control techniques can be switched.

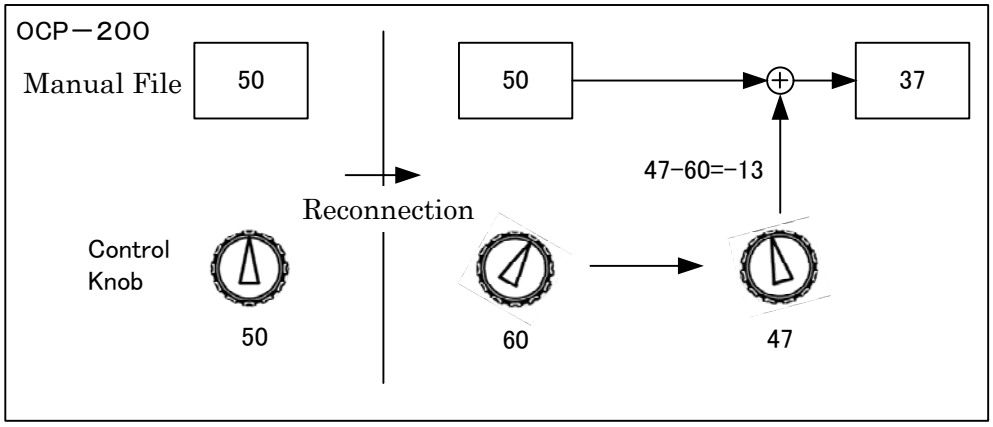
***Reference*** Refer to “6. ABSOLUTE VALUE IRIS CONTROL”,”RELATIVE VALUE IRIS CONTROL” for detail operation. Refer to “18. PANEL SETUP(PANEL CONFIG.)” for change method.

## 5.3 Reconnection Process

In case of previous OCP operation, data jump happens at re-connection by camera power ON/OFF or Panel Enable ON/OFF if volume position is different from before and after reconnection because volume position data reflects Absolute Control Data when camera and panel is re-connected.




In case of OCP-200, data jump will not happen at re-connection by camera power ON/OFF or Panel Enable ON/OFF if Control Knob position is different from before and after reconnection because Control Knob position data reflects Relative Control Data when camera and panel is re-connected.




This function enables panel replacement at the On-Air operation without attention for Control Knob position and without any shock for PGM video (Iris may be shifted depending on control mode).
And also, this function is effective for scene file. Data jump will not happen at scene file loading and control can be started from its volume position. By using Knob Free function mentioned later, the level of scene file can be used for the center of control level.

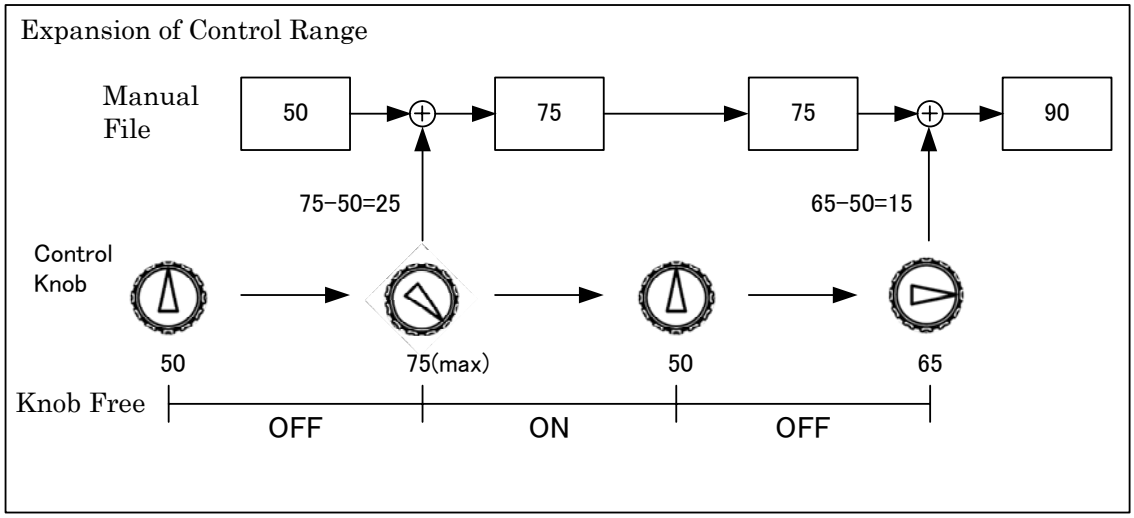
***Reference*** Refer to “5.4 Knob Free Function for detail operation”.
Refer to “6. ABSOLUTE VALUE IRIS CONTROL”, “RELATIVE VALUE IRIS CONTROL” for detail operation.

## 5.4 Knob Free Function

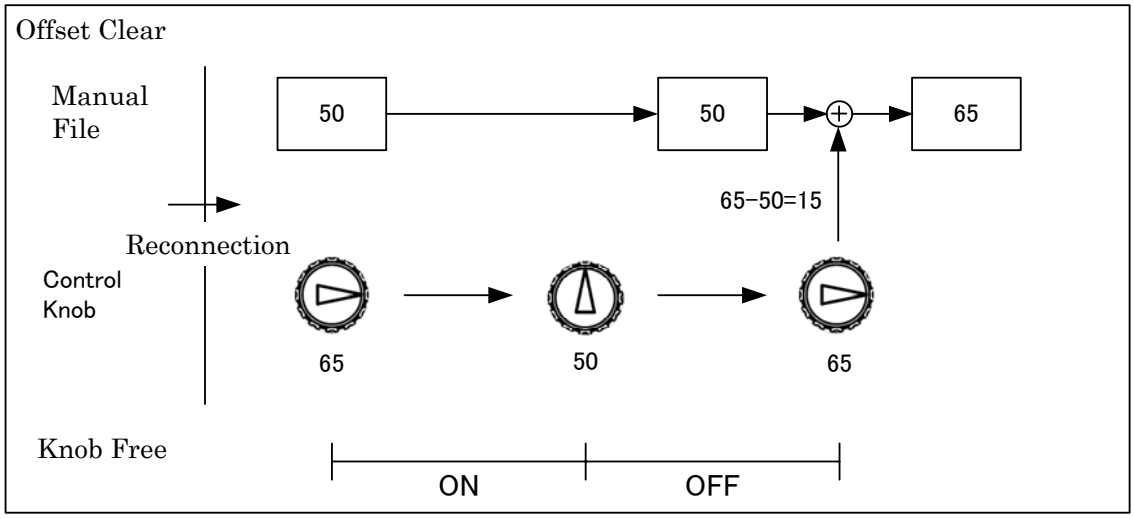
OCP-200 has Knob Free Function. This function enables to clear knob offset and to expand control range because knob control is disabled when this switch is pushed.

### 1) Control Logic

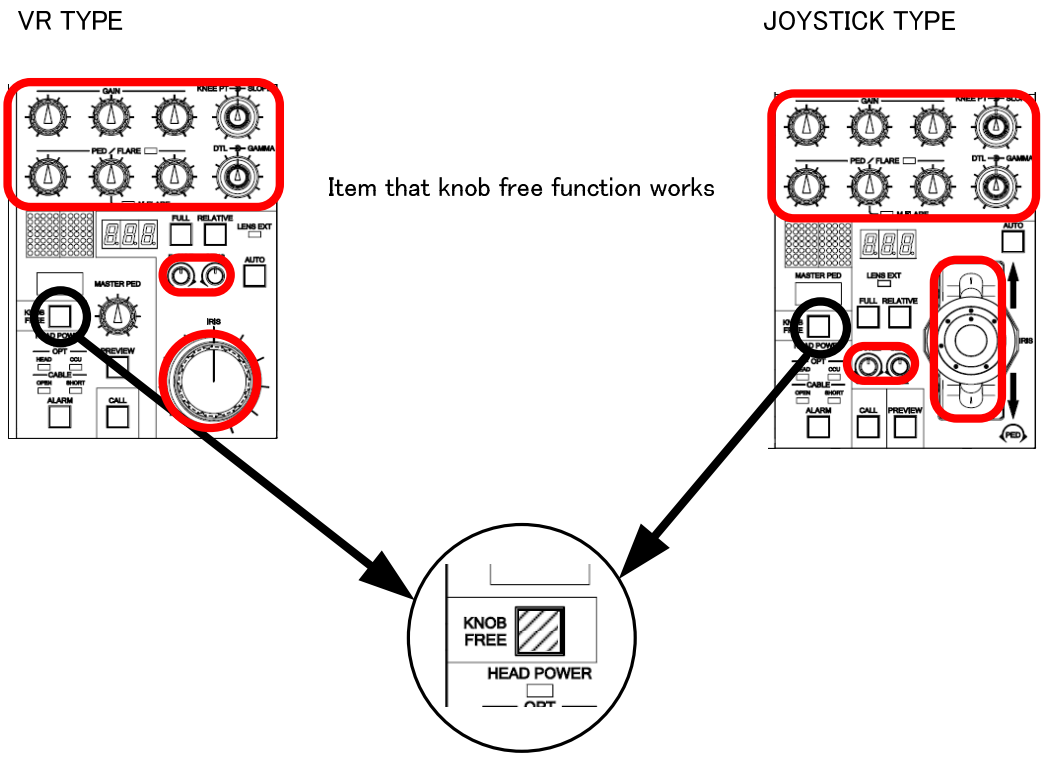
At the Knob rotation, potentiometer may reach to MAX or MIN and further control becomes unable. In that case, keep pressing KNOB FREE Switch and rotate Knob to the center position at first, and release KNOB FREE switch. This action clears Knob offset and enable to control further range beyond MAX or MIN of volume.
But control range of camera itself will not be expanded with this function.




If Reconnection is done at Power ON or Panel Enable set from OFF to ON, control range of Knob may be offset depending of Knob position. After reconnection, the Knob offset can be cleared by pushing KNOB FREE Switch and rotating Knob to the center position.



**2) Knob Fee Control Item**




The following items are controllable with Knob Free Function.

- **R/G/B GAIN**
- **R/G/B PED**
- **MASTER PED**
- **R/G/B FLARE**
- **MASTER FLARE**
- **KNEE POINT/SLOPE**
- **DTL**
- **GAMMA**
- **IRIS（Only available under Relative Control）**
- **IRIS RANGE/SENSE（Only available under Relative Control）**

**3)Knob free lock function（Only VR TYPE）**

VR TYPE has Knob Free Lock function. Knob Free Function disable control knob operation while pressing KNOB FREE Switch, on the other hand, Knob Free Lock Function disable control knob operation even if releasing to press KNOB FREE Switch. After pressing KNOB FREE switch, the switch is released within 0.5sec to lock Knob Free. The period from pressing the switch until click sound heard is almost 0.5 sec. And KNOB FREE switch lights when KNOB FREE LOCK function is active. To clear the lock, press the switch again.

***CAUTION*** KNOB FREE LOCK will be cleared at the power on or panel assignment change.

***Note*** Releasing time of the switch to active/disable KNOB FREE LOCK may depend on personal sense. Try some times to get the feeling before actual operation.

# 6. ABSOLUTE VALUE IRIS CONTROL

Absolute Value Iris Control is used for existing Ikegami OCP and Iris operation is controlled by absolute value. Relative Switch light turns off at Absolute Value Iris Control mode. This is default setting at the Ikegami command control (traditional one by one control), Iris is controlled by this logic. “Absolute value iris control” and “Relative value iris control” can be switched with Panel Config.

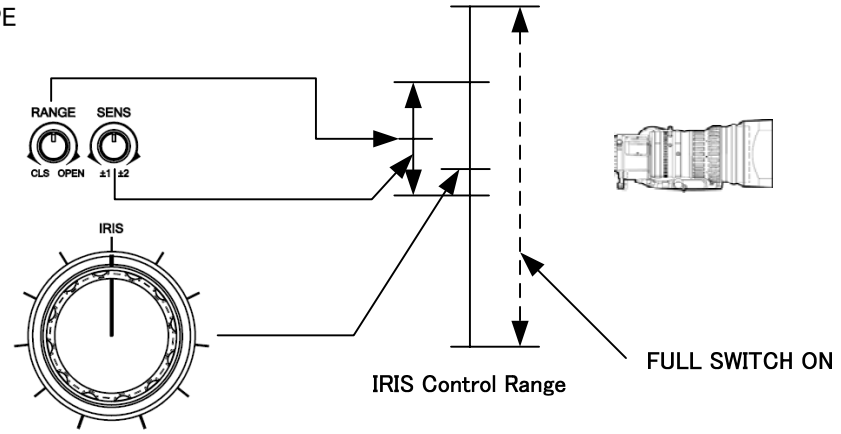
Actual Iris value is also added from MCP if MCP is connected.

| Switch | IRIS Control Range Knob | | |
|---|---|---|---|
| FULL | RANGE | SENSE | IRIS Control Knob |
| Light Off | To set center position of IRIS control range | To set Iris control range from the center | Iris control range is limited within setup of RANGE and SENSE. |
| Light On | Inoperative | Inoperative | Available to control entire Iris control range. |

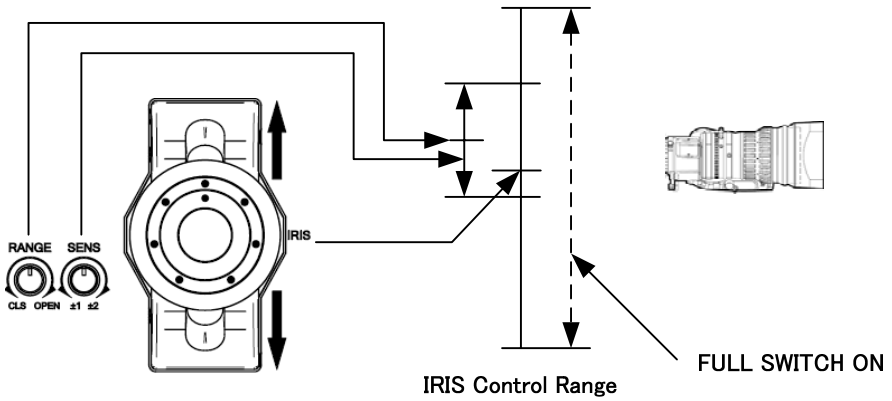
If the Full switch is set On, the entire Iris control range can be controlled.

If the Full switch is set Off, the Iris control becomes limited within a range set by the combination of the Range and Sense controls. The Range sets the mid-point, and the Sense sets the amount of plus/minus correction available around the mid-point.

VR TYPE




JOYSTICK TYPE



## 6.1 Manual File Clear for Iris Control Data

In case of parallel connection of OCP and MCP, Iris Manual file was cleared occasionally in previous control system. However, Manual File of OCP-200's system sometime will not be cleared automatically. This is not failure of OCP-200, but proper work in the control system. In OCP-200, it is possible to clear by manual.
If Manual File data is added to Iris value, Iris value of OCP-200 and that of Lens will be different among them and it causes confusion for the operation. To clear the difference, press RELATIVE switch to clear Manual File.
Or, press FULL switch to change IRIS Control Range Knob Enable/Disable, Manual File will be cleared.

**・Blinking of RELATIVE Switch**

By blinking of RELATIVE Switch Light of OCP-200, indication to be added Relative Value Data to Manual File is available (*Availability of this function depends on version of camera head firmware).
In the meantime, blinking of RELATIVE Switch can be disabled.

***Reference*** Refer to "18. PANEL SETUP(PANEL CONFIG.)" for change method.

## 6.2 Auto Iris Operation

In the Auto Iris mode, ±1f stop can be adjusted by the Iris control knob manually regardless of the On/Off status of the Full switch. Actual adjustment value is added from the setting from the other control panels.

## 6.3 Initial Mode

At the power on or panel enable ON/OFF, the status of FULL switch has been held. Iris value may be jumped according to Iris Knob position because of Absolute Value Control.

# 7. RELATIVE VALUE IRIS CONTROL

In the Relative Value Iris Control mode, Iris is controlled by Relative value data similar as Iris control of MCP. And RELATIVE switch light turns on. Default setting of network connection is this mode. “Absolute value iris control” and “Relative value iris control” can be switched with Panel Config.
Actual Iris control value is added from the other control panel.
If Relative Value data is not added from the other panel, Iris control manner is the same as Absolute Value Control.

| Switch | IRIS Control Range Knob | | |
|---|---|---|---|
| FULL | RANGE | SENSE | IRIS Control Knob |
| Light Off | To set center position of IRIS control range | To set Iris control range from the center | Iris control range is limited within setup of RANGE and SENSE. |
| Light On | Inoperative | Inoperative | Available to control entire Iris control range. |

If the Full switch is set On, the entire Iris control range can be controlled.
If the Full switch is set Off, the Iris control becomes limited within a range set by the combination of the Range and Sense controls. The Range sets the mid-point, and the Sense sets the amount of plus/minus correction available around the mid-point.

## 7.1 Data Clear of the other control panel

In case of Relative Value data is added from the other control panel and the difference of Iris data between OCP and Lens, Iris knob position offset or the other inconvenience may be caused. It can be cleared by Knob Free Function(see next page), and also, it is possible to clear Relative Data from the other control panel and Iris control value of OCP and Lens Iris position can be synchronized.
By pressing RELATIVE switch, command for Iris Manual File clear will be sent. After the clear, Relative Value Control data of Iris Control data which is set by OCP Iris Control Knob and Iris Range Control Knob will be sent. Then Manual File of camera head can be set only by OCP’s control value.
And in case of pressing FULL switch and changing IRIS range control knob Enable/Disable, IRIS control value of OCP and Lens Iris position cane be synchronized.

**・Blinking of RELATIVE Switch**

By blinking of RELATIVE Switch Light of OCP-200, it can be displayed to have caused the difference in the iris position of the lens and the IRIS control value of OCP. (*Availability of this function depends on version of camera head firmware). In this case, the IRIS control value of OCP can be matched to the iris position of the lens by pushing the RELATIVE switch.
In the meantime, blinking of RELATIVE Switch can be disabled.

***Reference*** Refer to “18. PANEL SETUP(PANEL CONFIG.)” for change method.

**・The difference of reaction after pressing RELATIVE switch depending on Camera Head Software**

Depending on Camera Head Software, the reaction after pressing RELATIVE switch will be different. In case that camera software doesn't apply to RELATIVE switch blinking function, OCP sends Manual File Clear command and Relative Value of Iris Control Value will be sent later. If the Lens Iris Position and Iris Control Value is different, Iris will be changed with bouncing. Meantime, camera software applies RELATIVE switch blinking function, Manual File will not be cleared but the difference between Lens Iris Position and OCP Iris Control Value is subtracted from Manual File. Then Lens Iris Position and Iris Control Value will be synchronized smoothly.

## 7.2 Auto Iris Operation

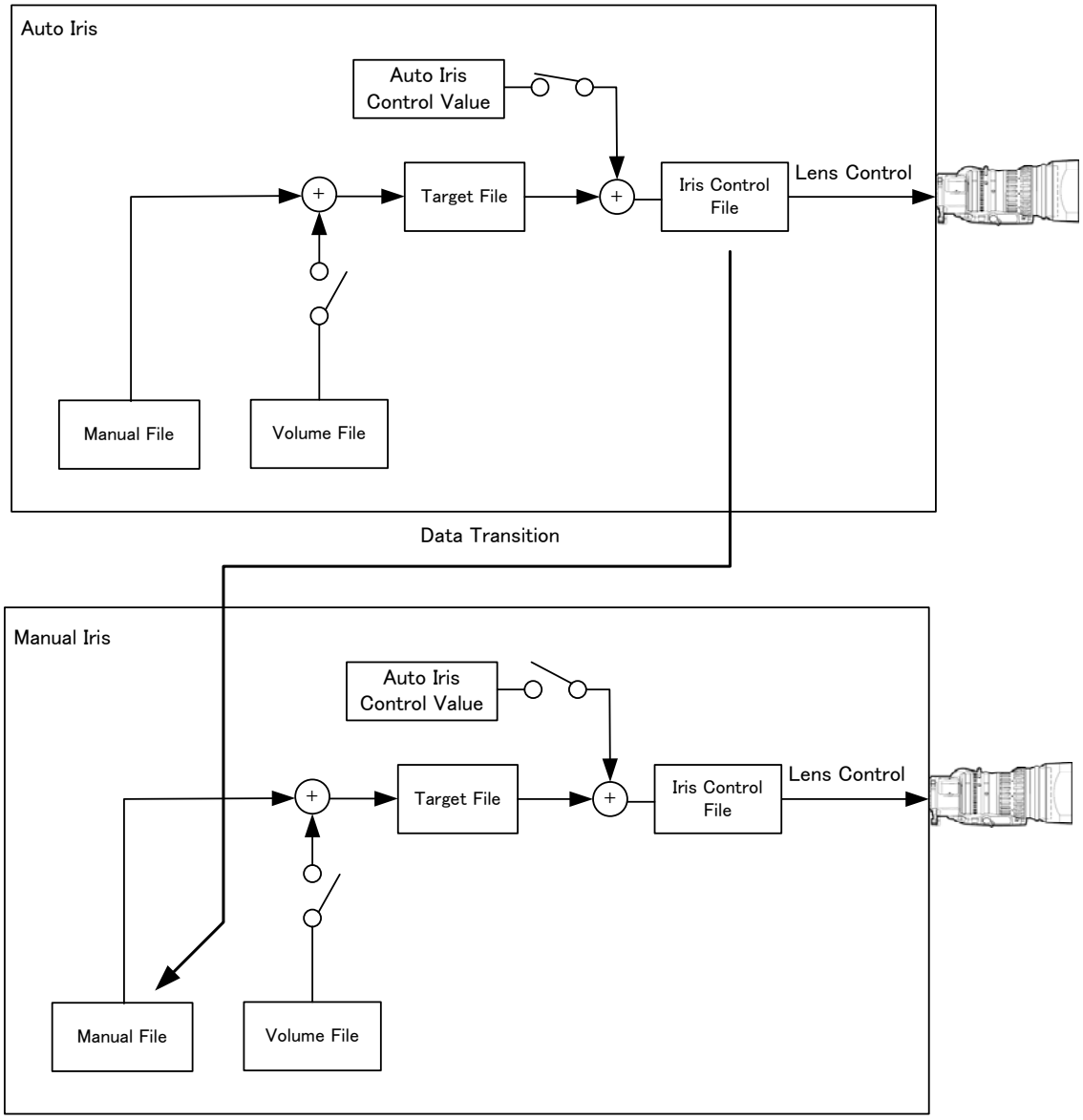
In the Auto Iris mode, ±1f stop can be controlled by the Iris control regardless of the On/Off status of the Full switch. Actual adjustment value is added from the setting from the other control panels.

*** Iris Value Holding Function**

The cameras mentioned below have a new function to hold the Iris value when switching from Auto Iris to Manual Iris to minimize Iris change.

***CAUTION*** Please confirm the presence of the function to the camera used before operation. And, please use it after it understands enough.

When switching from Auto to Manual Iris mode, the Manual File is overwritten by calculation from Iris Control File. Then the value of the Iris Control File will be similar to the value in Auto Iris. The change of Iris will be minimized at the switching.



After switching to Manual Iris, Iris control can be started from the latest knob position. If FULL switch is ON, Iris Range Control Knob position is disabled, however, if FULL switch is OFF, Iris Range Control Knob position is active.
By using this function, switching from Auto Iris mode to Manual Iris mode without Iris Data jump. Seeing from one OCP, there may not control FULL range control if FULL switch light is ON, Or there may be gap between Lens Iris position and OCP's Iris value to become Iris Knob offset. To clear those inconvenience, use Knob Free Function, or press either FULL switch or RELATIVE.

***Note*** In changing from Auto Iris mode to Manual Iris mode, amp gain of lens will be changed. This gain change may cause Lens Iris fluctuation.

## 7.3 Initial Mode

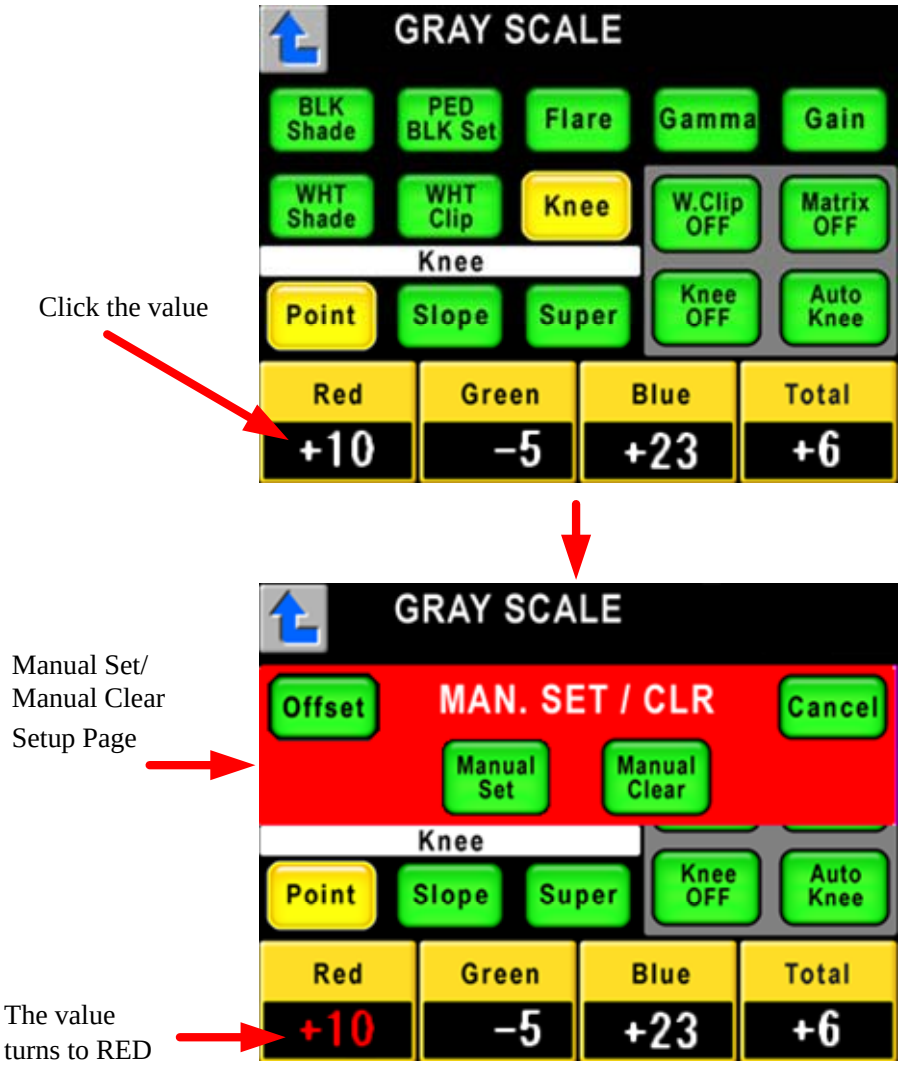
The On/Off status of the Full switch is held during Power On and Panel Enable On/Off. Because of Relative Value Control, the Iris will not jump even if the Iris control is in a different position compared to when the Panel Enable was set to Off.
There may be gap between Lens Iris position and OCP's Iris value to become Iris Knob offset. To clear those inconvenience, use Knob Free Function, or press either FULL switch or RELATIVE.

# 8. MANUAL SET/ MANUAL CLR

The value adjusted by Rotary Encoders or Volumes can be registered (MANUAL SET). Or the changed values can be back to be registered values (MANUAL CLEAR).

## 8.1 Manual Set/Manual Clear by LCD screen

Press parameter area for Manual Set/Manual Clear at the menu page which can be controlled by Rotary Encoder.

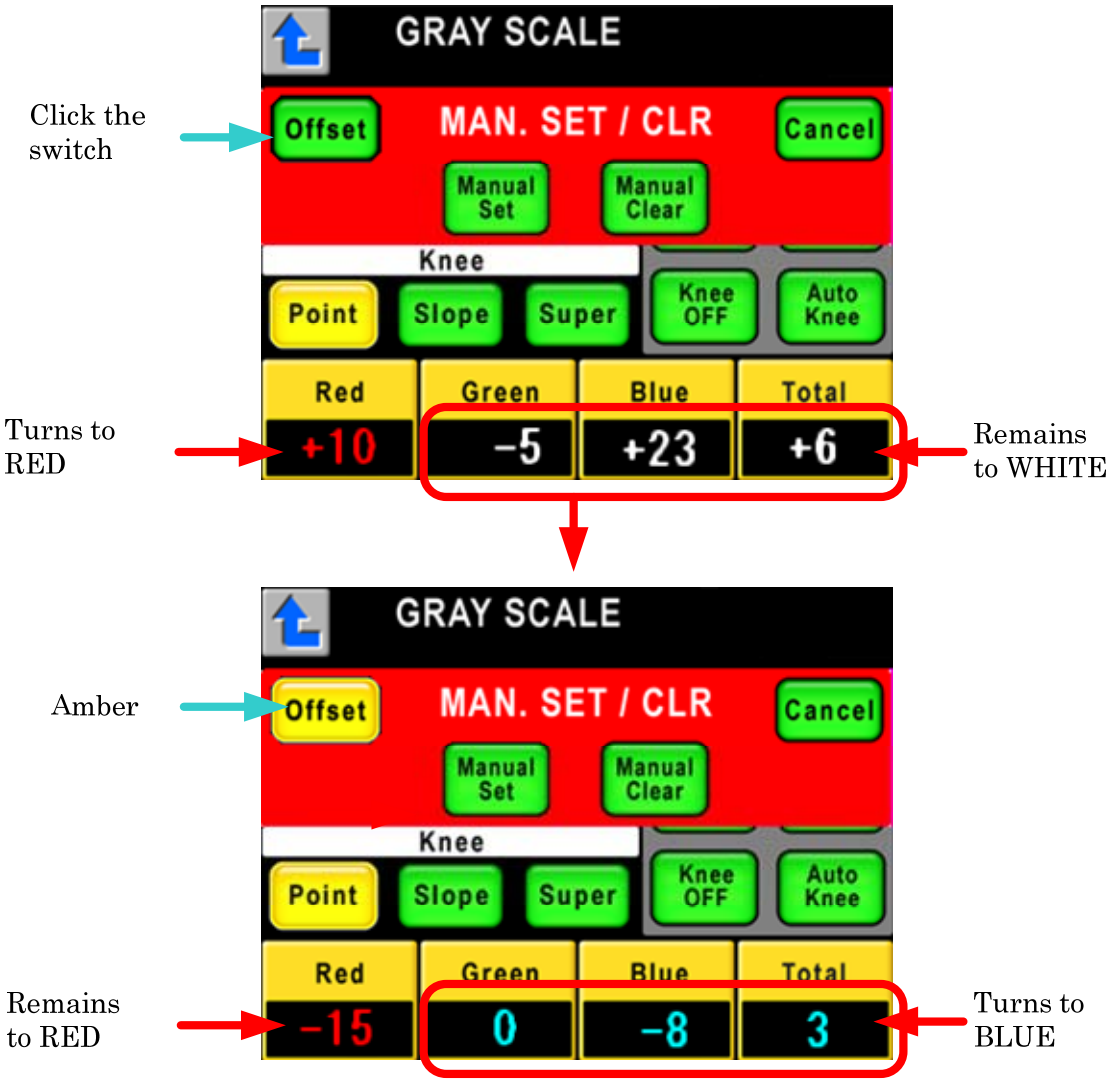



The control value is displayed in RED and MANU SET/CLR setup page will overlaid. Press the control value to be set by Manual Set/Manual Clear Click. The color of the value turns to RED for confirmation of selection. Press the value again to the cancel. Press the Manual Set switch in a couple of seconds or press the Manual Clear switch for execution. After execution or pressing the Cancel switch, the screen returns to the previous menu.

***Note*** If the control item is set OFF, Manual Set and Manual Clear are disabled.

## 8.2 Display of offset control data

To set [Offset] switch ON(Amber) in MAN. SET/CLR page, and the indication of control value turns to the deviation value from Manual Set Value (or value adjusted automatically by Auto Setup value) (at Offset Display Mode). At this mode, it can be adjusted how much from the preset value registered by Manual Set, or it can be checked at a glance. When the value is "0", it is preset default status. By pressing [Offset] switch sequentially, ON/OFF of Offset Display Mode can be switched. The value is Blue at Offset Display Mode is ON, but selected value remains to RED.



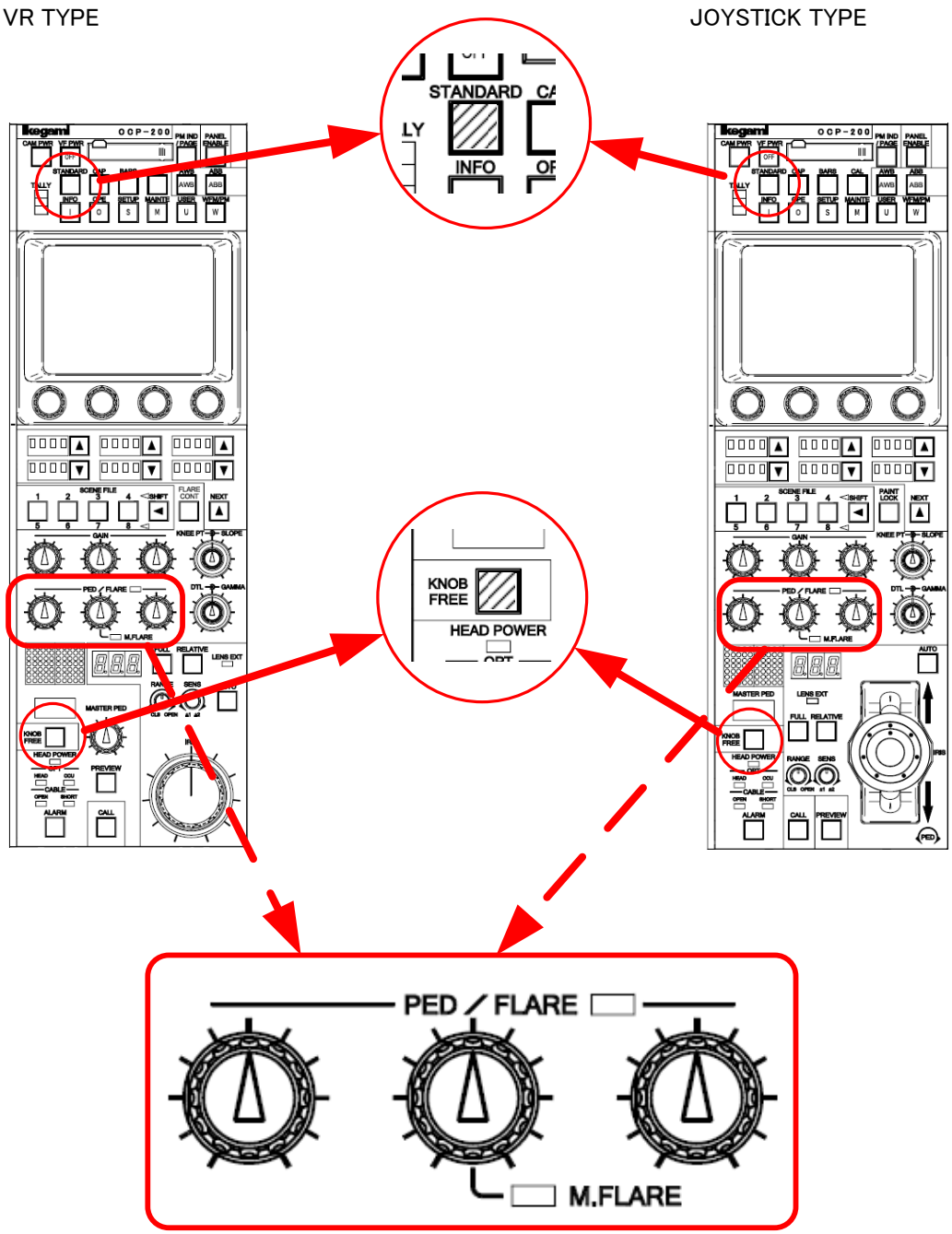

ON/OFF setting of Offset Display Mode set at this page is also reflected to the other menu pages. Control value is displayed in Blue when Offset Display Mode is ON.

ON/OFF setting of Offset Display Mode can be set at Panel Config. page for the default setup, too.

***Reference*** Refer to "18. PANEL SETUP(PANEL CONFIG.)" for change method.

## 8.3 Lumped Manual Clear of Control Knob Operation

With the All Manual Clear function, you can clear the adjustment values for all the Control Knobs.
Keep pressing KNOB FREE switch and STANDARD switch.




Cleared item depends on the setting of PED/FLARE Control Knob in Panel Config. Menu.

## 8-4 8. MANUAL SET/ MANUAL CLR

Items to be cleared by PED/FLARE Control Knob

| Cleared Item | Panel Config. Setting | | | | | | |
|---|---|---|---|---|---|---|---|
| | Black Knob | | | | | | |
| | (SELECT) | | | (PED) | (FLARE) | | |
| | Center Flare | | | | Center Flare | | |
| | (AUTO) | (G CH) | (MASTER) | | (AUTO) | (G CH) | (MASTER) |
| R/G/B PED | ○ | ○ | ○ | ○ | × | × | × |
| R/B FLARE | ○ | ○ | ○ | × | ○ | ○ | ○ |
| G FLARE | *2 | ○ | × | × | *2 | ○ | × |
| MASTER FLARE | *1 | × | ○ | × | *1 | × | ○ |

○: To be Cleared

×: Not to be Cleared

*1: To be cleared if camera supports MASTER FLARE function.

*2: To be cleared if camera doesn't supports MASTER FLARE function.

| Cleared Item | Condition to be Cleared |
|---|---|
| R/B GAIN | ・AWB Data Cleared(in case that camera head command is not supported) |
| | ・AWB Data Not Cleared(in case that camera head command is supported) |
| G GAIN | ・R/B GAIN is changed instead of G Gain. |
| MASTER PED | |
| KNEE POINT/SLOPE | |
| DTL | |
| GAMMA | |
| IRIS (Include: RANGE/SENSE) | ・In case of Relative Value Control<br>・To accord Iris Knob Position and Lens Iris position. |

***Note*** Not Only the values adjusted by all the Control Knobs but also the values adjusted by Rotary Encoders are released. Example; When you use the control knob and Rotary Encoder Knob for adjusting the values for the item of R.GAIN, its value is released.
If the control item is set OFF, Manual Clear is unable by this operation.

- **GAIN Data Clear**

  At the execution of Lumped Manual Clear of Control Knob Operation, the result of Gain data clear is different depending on type of camera head or version of firmware.
  In case of previous camera, AWB data is also cleared. But in case of recent camera which supports camera head command, AWB data is not cleared and control value can be cleared by Control Knobs or Rotary Encoders.

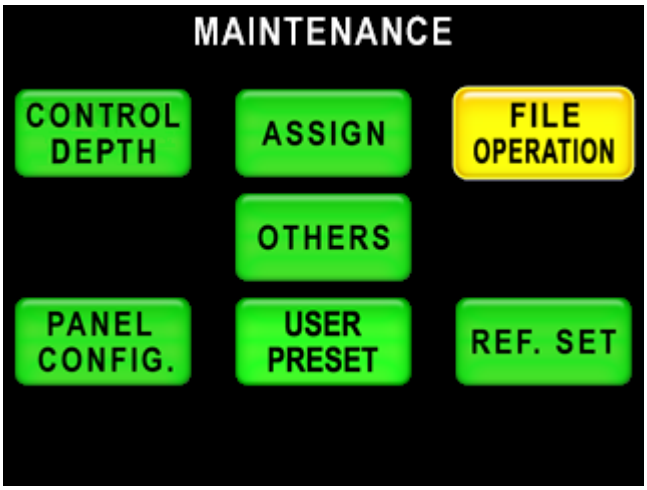
  ***Note*** Try this function and confirm how camera reacts before actual operation.

## 8.4 All Manual Set / All Manual Clear

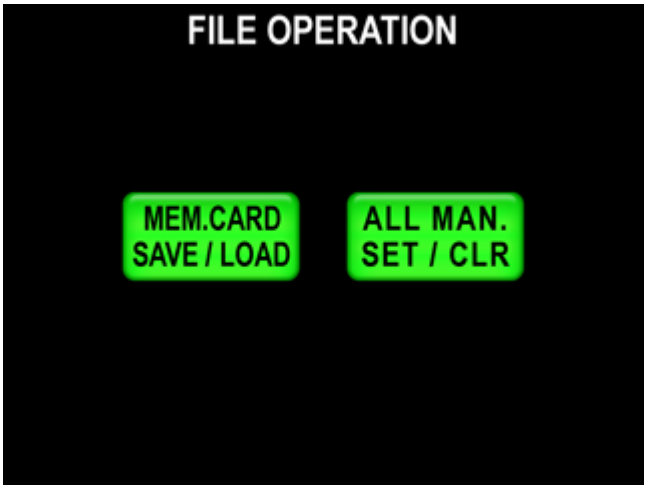
Manual Set and Manual Clear are available for all functionality of Camera Head and BS/CCU.

1. Push the MAINTE Switch from the FUNCTION Switches in the upper part of the LCD.

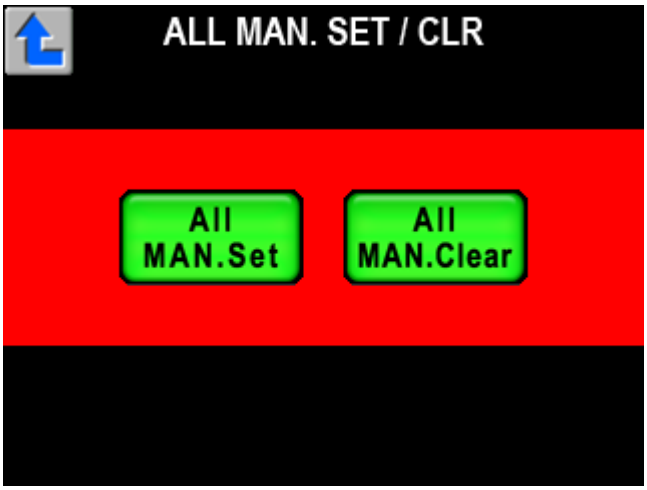

2. Push [FILE OPERATON] on LCD screen.




3. Select [ALL MAN.SET] or [ALL MAN CLR].



4. Press [All MAN. Set] for All Manual Set function or [All MAN. Clear] for All Manual Clear function. Switch will blink at the execution. And keep pressing until buzzer will beep.




***Note*** This operation executes Manual Set or Manual Clear for all control items, if control item is set OFF. However, some of functionality in Camera Head and BS/CCU doesn't apply to Manual Set and Manual Clear because of its specification.

# 9. MEMORY CARD OPERATION

The setup descriptions of camera, Camera Data File, Auto Setup Reference File, Scene File, Lens File and Snap Shot file, can be saved into Memory Card.
And saved above mentioned data files can be copied to the camera. And data of multiple cameras can be saved and read out with one memory card to be convenient for the daily operation.

By using SD Memory Card, OCP, firmware of connected Camera Head and BS/CCU can be updated.

***Reference*** Refer to “19. FIRMWARE UPDATING” for the detail.

## 9.1 Type and capacity of memory card

Adopting SD Memory Card of which is used for Digital Camera etc..
The upper bound capacity of the SD memory card that can be used is different according to the version of the firmware. Similarly, the upper bound capacity of the SD memory card that can be used is different according to the version of "Update program".
The upper bound capacity that can be used can be confirmed by the following. In the one that “SD-2G" is displayed, the upper bound capacity is 2G byte. In the one not displayed, the upper bound capacity is 1G byte.
The lower bound capacity is 32MB.

***Note*** Doesn't support the SDHC memory card, the miniSD card, and the microSD card.

***CAUTION*** SD Memory Card should be formatted by SD Memory Card Compliant format. Some of PC OS format standard doesn’t support SD Memory Card Format. In that case, SD Card doesn’t work properly with OCP-200.
Please use it after confirming the upper bound capacity that can be used.

### 1) Confirm method of upper bound capacity of firmware

The upper bound capacity of the SD memory card that can be used by the firmware can be confirmed on the Firmware screen that is 5/5 page of the Information screen.
Moreover, the upper bound capacity can be confirmed on the screen where data is read and written.

***Reference*** Refer to “19. FIRMWARE UPDATING” for the detail.

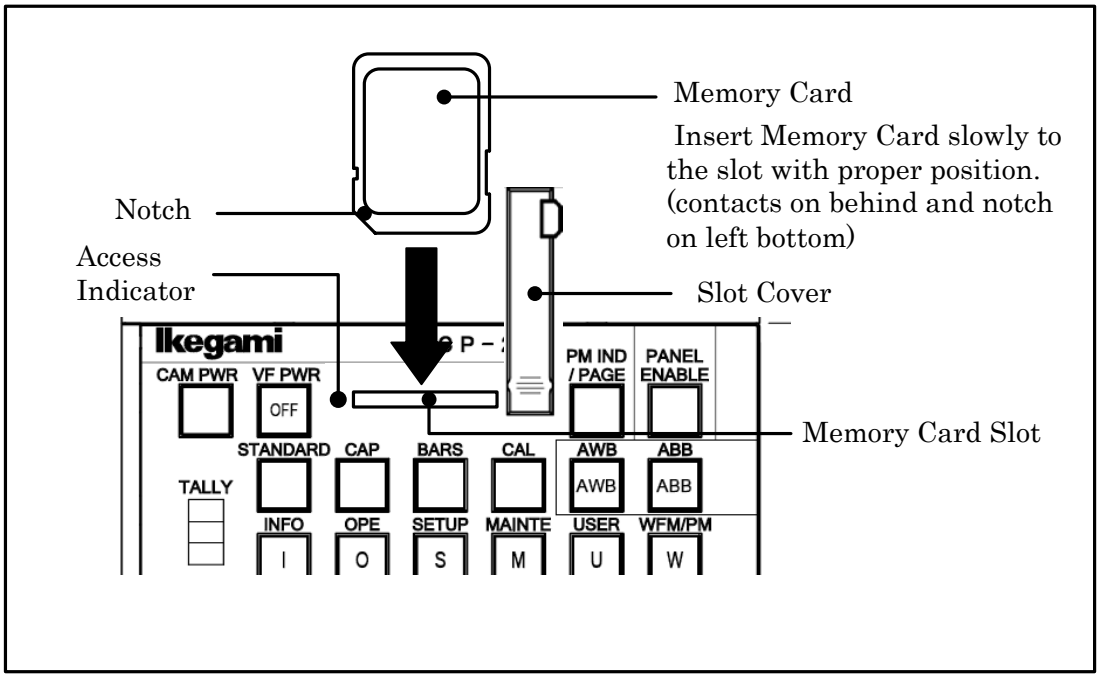
### 2) Confirm method of upper bound capacity of Update program

It is possible to confirm it on the update program screen of the firmware.

***Reference*** Refer to “10. INFORMATION”.

## 9.2 Insert/Extract of Memory Card

To use memory card, pull left end of slot cover and turn 90 degree to clockwise. Insert Memory Card slowly to the slot with proper position (contacts on behind and notch on left bottom) until hearing click sound. The buzzer will beep.
To eject Memory Card, push calmly the top of the Card until hearing click sound. Please wait until the card is pushed out, and beep extract sensing buzzer, and pull it out slowly. After Memory Card operation, put the slot cover for the dust proof.



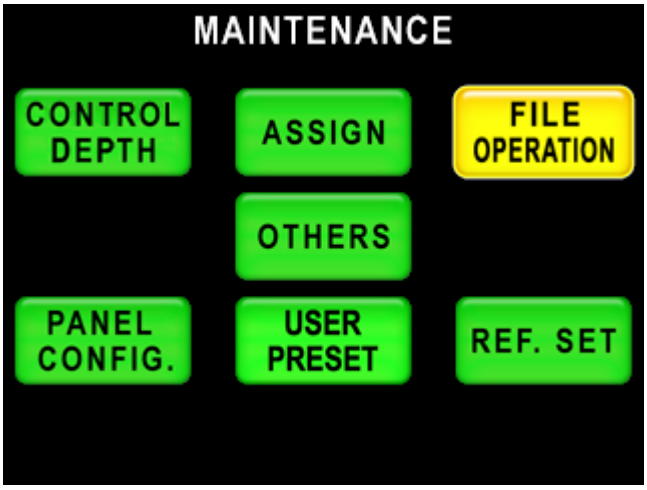

***CAUTION*** Do not extract Memory Card when access indicator on the slot lights or Saving/Loading data to/from Memory Card. Data or Card itself may be damaged.
Removing sensor buzzer will not beep BUZZER, when Click Volume is set to "OFF" with Panel Config.

## 9.3 Format and Name Change of Memory Card

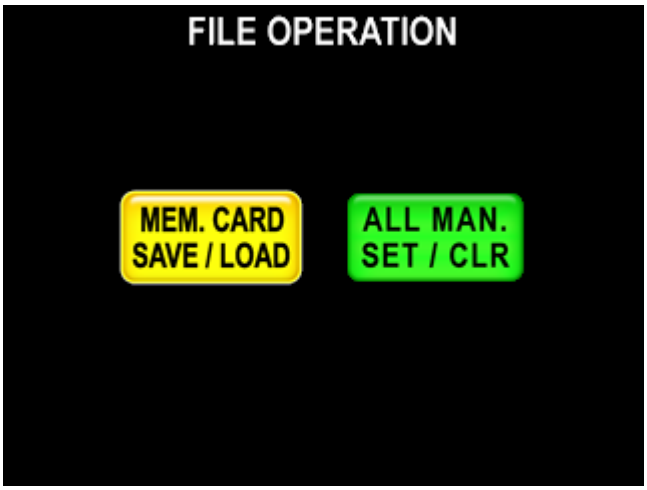
Re-format is necessary before using if the Card was formatted with non-compliant format.

1. Insert Memory Card slowly to the slot with proper position (contacts on behind and notch on left bottom)
2. Push the MAINTE Switch from the FUNCTION Switches in the upper part of the LCD.

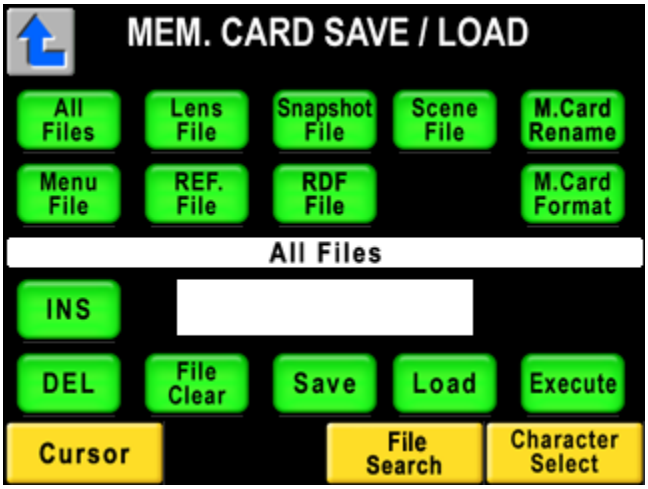

3. Push [FILE OPERATION] Switch on LCD menu.




4. Push [MEM.CARD SAVE/LOAD] on LCD Menu.



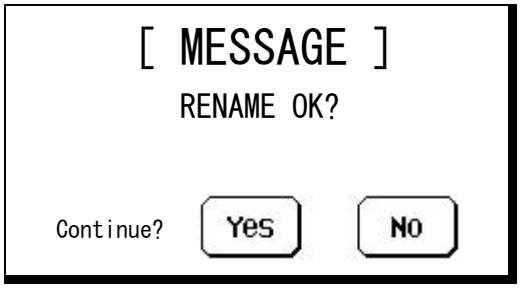
5. To format SD Card, press [M.Card Format Switch] a couple of seconds.
   To change name of SD Card, press [M.Card Rename].
   LCD Display will change to Card Name Input Screen as following and cursor will come up to input. The card name can be changed at the format.

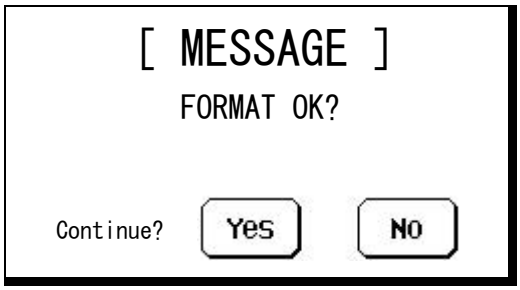



6. Input Card Name.

***Reference*** Refer to "9.4 Memory Card Name / File Name Operation" for input procedure of Card Name.

7. Push [Execute] switch and message widow will come up.

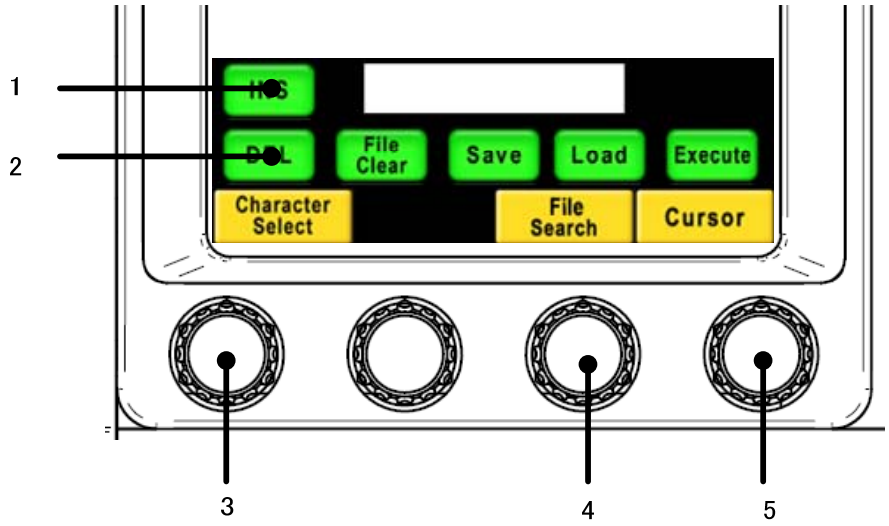



8. If "Yes" switch is pushed, card name will be changed immediately at the card name change, or format will be done immediately at the formatting. Buzzer will beep after execution is completed. Press "No" Switch it stop formatting.

## 9.4 Memory Card Name / File Name Operation

Naming to Memory Card or Files is available.
11 letters for Memory Card naming and 8 letters and 3 letters of extension for File naming are available.
Below alphabets, numerals and symbols can be used:
Characters: ABCDEFGHIJKLMNOPQRSTUVWXYZ!#$%&'( )+-=@[ ]^_{}0123456789
If no File Name is input, the File Name will be “NONAME01” automatically.

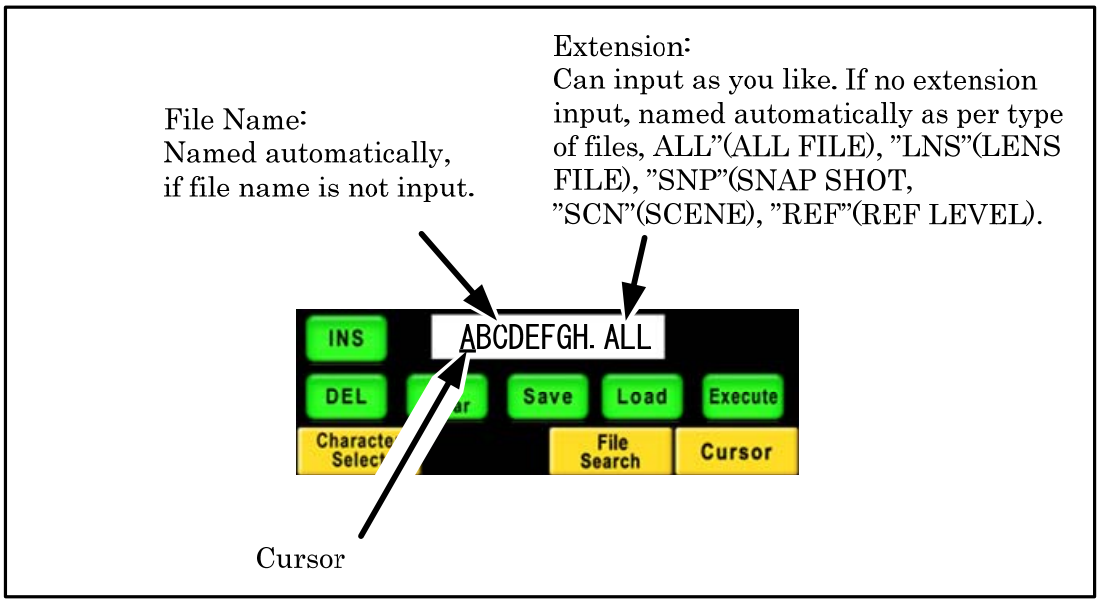



1. Insert Switch : Insert one letter of (_) to letters.
2. Delete Switch : Delete one letter.
   Or, keep pushing to delete all input letters.
   (Extension will not delete for file name input)
3. Cursor Control : Move Cursor.
4. File Search Control : Search the File.
5. Character Selection Control : To select input letters from Alphabets, Numerals or Symbols.

## 9.5 File Data Save to Memory Card

1. Insert Memory Card to the slot
2. Push MAINTE Switch in Function Switches on the top of panel. And push [FILE OPERATION] switch in LCD display, and push [MEM. CARD SAVE/LOAD] switch of LCD function switch.


3. Select and push the switch for the type of data to be saved.
   ・In case of all Data File, push [ALL Files] switch.
   ・In case of Lens File, push [Lens File] Switch.
   ・In case of Snap Shot File, push [Snapshot File] switch.
   ・In case of Scene File, push [Scene File] switch.
   ・In case of Menu File, push [Menu File] switch. （Not working yet）
   ・In case of Reference [Level File], push [REF. File] switch.
4. Turn Save switch to “ON”.




5. Input File Name by using switches on LCD and Rotary Encoder Knob.
6. Push [Execute] switch.
   [Execute] Switch will light and File Name and Execution Status will be displayed on LCD screen. File Data will be saved.

At the completion, the indication will come up on LCD screen and buzzer will beep. The indication will disappear 1.5 sec later.


***Note*** If the same file name is existed, below warning message will come up. Push "Yes" to overwrite. Or, push "No" to cancel saving.


***CAUTION*** Please confirm the clock on the information screen when you preserve critical data. It becomes the time stamp of the file on the SD card.

## 9.6 File Data Loading from Memory Card

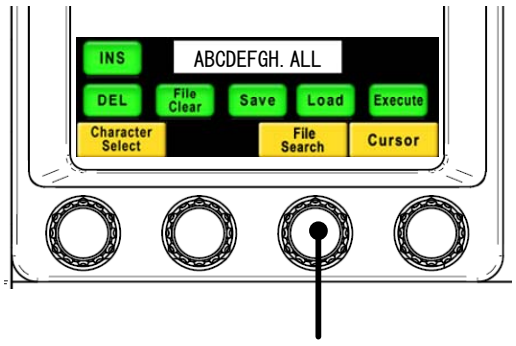
1. Insert Memory Card to the slot
2. Push MAINTE Switch in Function Switches on top of the panel. And push MAINTE Switch on LCD display and Push [MEM.CARD SAVE/LOAD] switch on LCD function switch.


3. Select each of switches to be necessary.
   ・In case of all Data File, push [ALL Files] switch.
   ・In case of Lens File, push [Lens File] Switch.
   ・In case of Snap Shot File, push [Snapshot File] switch.
   ・In case of Scene File, push [Scene File] switch.
   ・In case of Menu File, push [Menu File] switch. （Not working yet）。
   ・In case of Reference Level File, push [REF. File] switch.
   ・RDF File Switch is used for firmware updating of each equipment.

***Reference*** Refer to “19.2 Update Procedure of Connected equipment” for detail of update procedure.

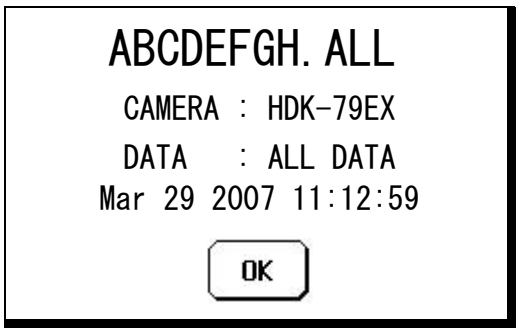
4. Turn [Load] switch to “ON”.
5. Rotate for File Search Control Knob to choose the needed file. Or, input new File Name buy using LCD switch, Cursor Control Knob and Character Selection Control select Knob.

***Note*** By using search function, needed file can be found. For example, if initial of File Name “AB” is input and rotate File Search Control Knob, search function activates to find the file of which has initial “AB”. By similar way, File Search is available with Extension.




File Search Control

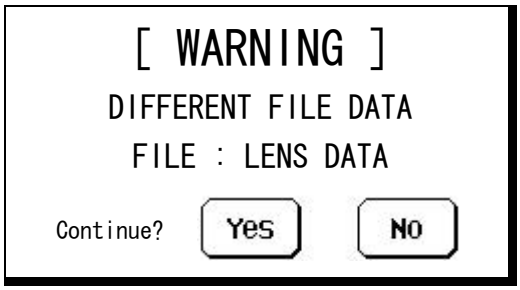
***Note*** Push Name of File Data to indicate File Data information and it allows to see Camera Model Name and Type of File. And if CONTROL/SELECT Knob is rotated, following data will be indicated continuously.




5. Turn Load switch to “ON”.
6. Push [Execute] switch.
   Execute Switch will light and File Name and execution status indication will come up. File Data will be loaded.


At the completion, the indication will come up on LCD screen and buzzer will beep. The indication will disappear 1.5 sec later.

***Note*** If file type is different, needed file can not be read out. For instance, Lens Data file can not be read out for SNAP SHOT data and below warning will come up.




If “YES” is pushed, below warning will come up. It is unable to read out in this case. Push “OK” to cancel.


The File Data saved as ALL DATA can be read out for another file type.
(Below example shows that an All DAT is read out for SNAP SHOT data)
Push “YES” switch in below window.

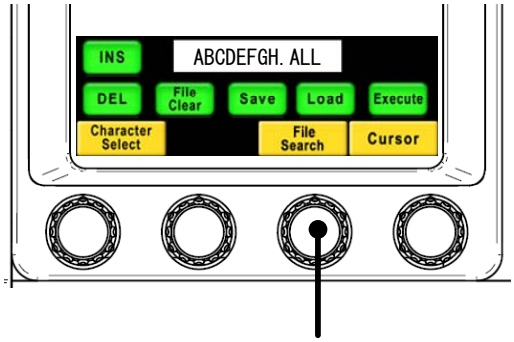

When RDF will be read out, following warning will come up. The file is inhibited to read out in this case. Press “OK” to clear the warning.

## 9.7 Delete of File Data from Memory Card

Delete of Data File from Memory Card is done with following procedure.
The deleted File Data can not be retrieved. Then attention to delete Data Files.

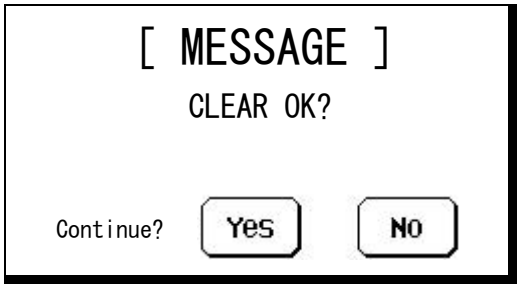
1. Insert Memory Card to the slot.
2. Push MAINTE switch in Function Switches on the top of panel. And push MAINTE Switch on LCD, and push [MEM.CARD SAVE/LOAD] switch on LCD screen.


3. Select each of switches to be deleted.
   ・In case of all Data File, push [ALL Files] switch.
   ・In case of Lens File, push [Lens File] Switch.
   ・In case of Snap Shot File, push [Snapshot File] switch.
   ・In case of Scene File, push [Scene File] switch.
   ・In case of Menu File, push [Menu File] switch. （Not working yet）
   ・In case of Reference Level File, push [REF. File] switch.
4. Turn [FileClear] Switch to “ON”.
5. Rotate for File Search Control Knob to choose the needed file. Or, input new File Name buy using LCD switch, Cursor Control Knob and Character Selection Control select Knob.




File Search Control

6. Push Execute switch.




7. Push “YES” to delete File Data. Or, push “NO” to cancel deleting.

***CAUTION*** If type of file data is different, the file will be deleted.

## 9.8 Update of firmware that uses memory card

By using SD Memory Card, OCP, firmware of connected Camera Head and BS/CCU can be updated.

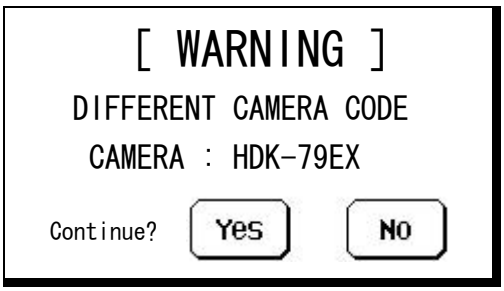
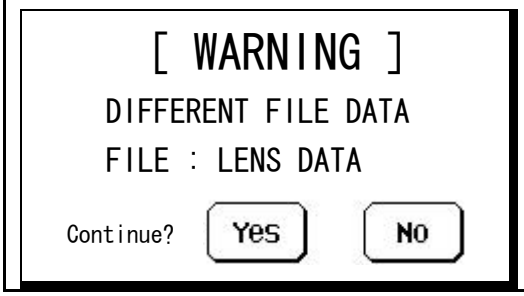
***Reference*** Refer to “19. FIRMWARE UPDATING” for the detail.

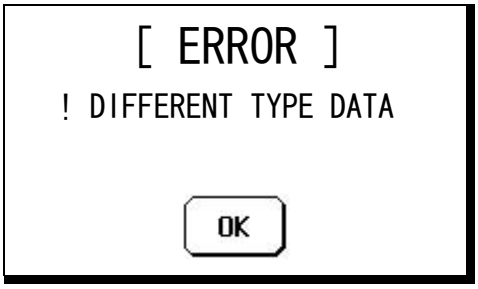
## 9.9 Message Indication

Following message window will come up at the Memory Card Operation of save, load or delete. Find details as below:

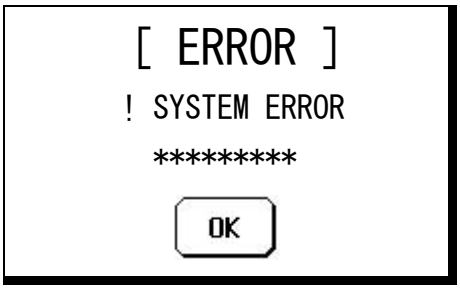
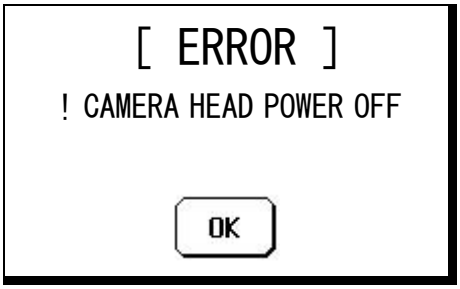
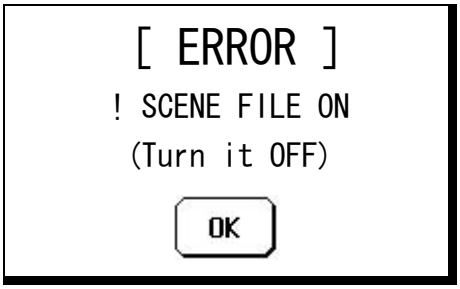
[ERROR] Window will be released by pushing "OK".

1／4

| Message | Description |
|---|---|
| [ WARNING ]<br>  | Same File Name is already existed in the Memory Card. Push "YES" switch to overwrite. |
|  | At the data read out, this message will come up when the file was created for different model of camera. Push "Yes" to read out. |
|  | At the data read out, this message will come up when the different type of data is selected. |

| Message | Description |
|---|---|
| [ ERROR ]<br>  | Data read out is unable because File Type of Data is different. |
|  | No file is existed in Memory Card when File data is read out. |
|  | Any system error happens in Memory Card system. |
|  | Type of File Data is different. |

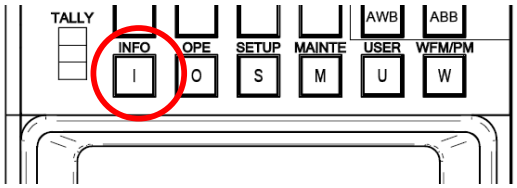
| Message | Description |
|---|---|
| [ ERROR ]<br>  | No proper data is not existed at the data read our. |
|  | Data File is broken at the data read out. |
|  | File data can not be created at the data saving. |
|  | File Name of data can not be supported. |

| Message | Description |
|---|---|
| [ ERROR ]<br>  | Any problem happed in file data processing of the Camera System.<br>· “COMMAND TROUBLE” : Any problem in communication processing path.<br>·“CAMERA DATA NOT FOUND" : Needed data is not existed in Camera Head at the data save.<br>·“FILE CLEAR” : Existing File Data is deleted by any failure at File Data overwriting at the data save. |
|  | Write Protect Sticker is attached on Memory Card at Data Save/Delete. |
|  | Camera Head Power OFF at Data Save/Load.. |
|  | Scene File is ON at Data Save/Load. Turn Scene File OFF before Data Save/Load. |

# 10. INFORMATION

OCP-200 has Information function which displays status of Camera Head or BS/CCU such as ON/OFF setup etc. on LCD screen.

To display INFO page, press INFO Switch in functions switched on top side of the panel.



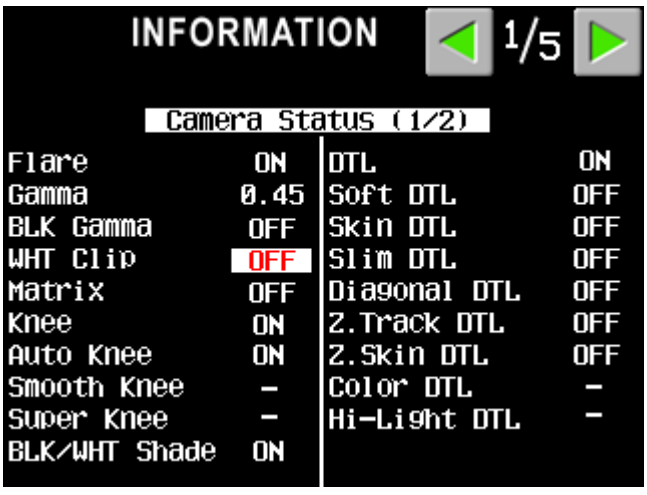

## 10.1 INFORMATION Page Configuration

INFORMATION pages consist of 5 pages.

- **Camera Status**

ON/OFF setting of Camera Head is displayed. Camera Status consists of 2 pages and page change can be done with switches on top right side.

Default setting item is displayed with white letters, but non default setting is displayed with red letters on white background. Not available functions are displayed with "–" symbol. If the information can not be sent because of camera power off, "–" symbol is also displayed.




***Note*** Camera Status display page doesn't show all of camera function. Camera Control Function on top side and some of Select Switch Functions on middle of the panel of the panel and such as BARS ON/OFF and GAIN UP etc.

Camera Status(1/2) Default Setting Table

| Description | Default | Description | Default |
|---|---|---|---|
| FLARE | ON | DTL | ON |
| GAMMA | 0.45 | Soft DTL | OFF |
| BLK GAMMA | OFF | Skin DTL | OFF |
| W.Clip | ON | Slim DTL | OFF |
| Matrix | OFF*1 | Diagonal DTL | OFF |
| Knee | ON | Z.Track DTL | OFF |
| Auto Knee | ON*1 | Z.Skin DTL | OFF |
| Smooth Knee | OFF | Color DTL | OFF |
| Super Knee | OFF | Hi-Light DTL | OFF |
| BLK/WHT SHADE | ON | | |

Camera Status(2/2) Default Setting Table

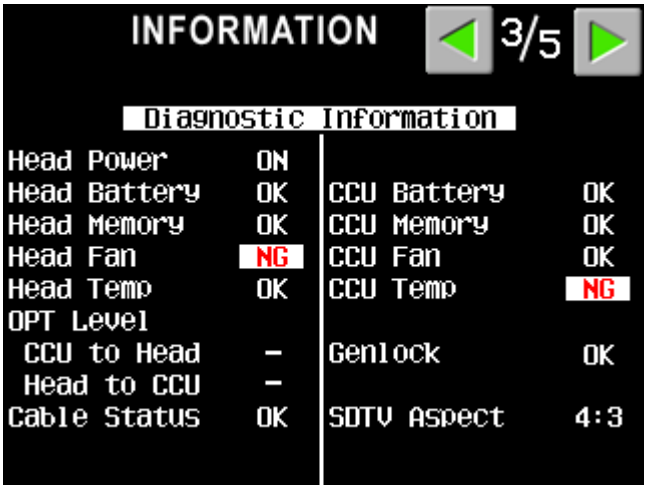
| Description | Default | Description | Default |
|---|---|---|---|
| Color SAT. | OFF | Super V | OFF |
| Chroma | ON | Shutter | OFF |
| Color CORR. | OFF | Speed | - |
| C.Temp 5600K | OFF | Zoom Remote | OFF |
| CSTM Color 1 | OFF | Focus Remote | OFF |
| CSTM Color 2 | OFF | DIASCOPE | OFF |
| Matrix | OFF*1 | TEST PULSE | OFF |
| Matrix SEL | - | | |
| | | Lens File No. | - |

***Note*** Default setting is the same as setting by Clear to Standard of Standard function. A standard setting can be changed about the item of *1.

***Reference*** Refer to “18. PANEL SETUP(PANEL CONFIG.)” for detail of a standard setting change.

- **Diagnostic Information**

  In the page 3/5 of INFORMATION menu, there is simple Diagnos page. This function enables to confirm the Diagnos partially on the system of which PM(Picture Monitor) doesn't connect to BS/CCU.



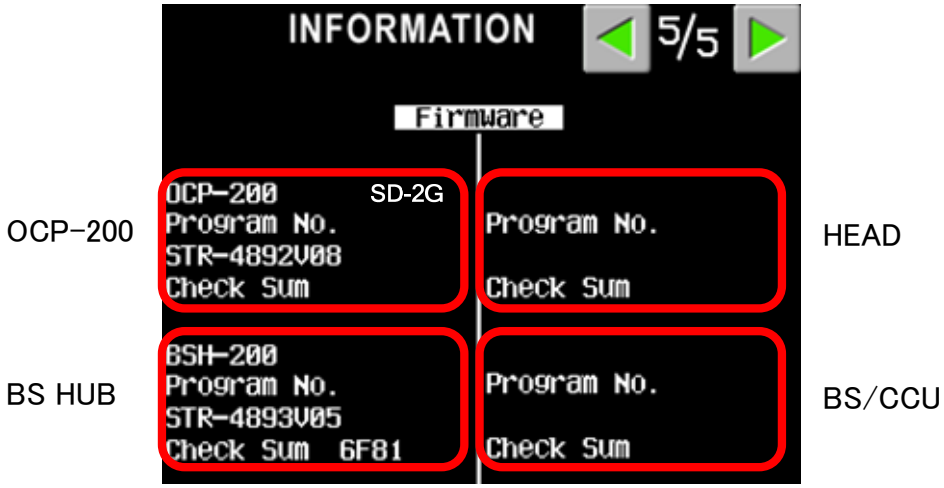

***CAUTION*** With some type of BS/CCU, simple Diagnostic page on OCP may not be displayed, even though Diagnostic information is displayed on PM(Picture Monitor). This is not trouble but OCP could not get Diagnostic information from BS/CCU, because previous BS/CCU doesn't support this function.

- **Others**

The other information is also displayed as Others items such as Clock, Clock Battery Condition, OCP connection type and Network ID.


- **Firmware**

Not only OCP-200, but also program no. of firmware for connected equipment can be displayed.

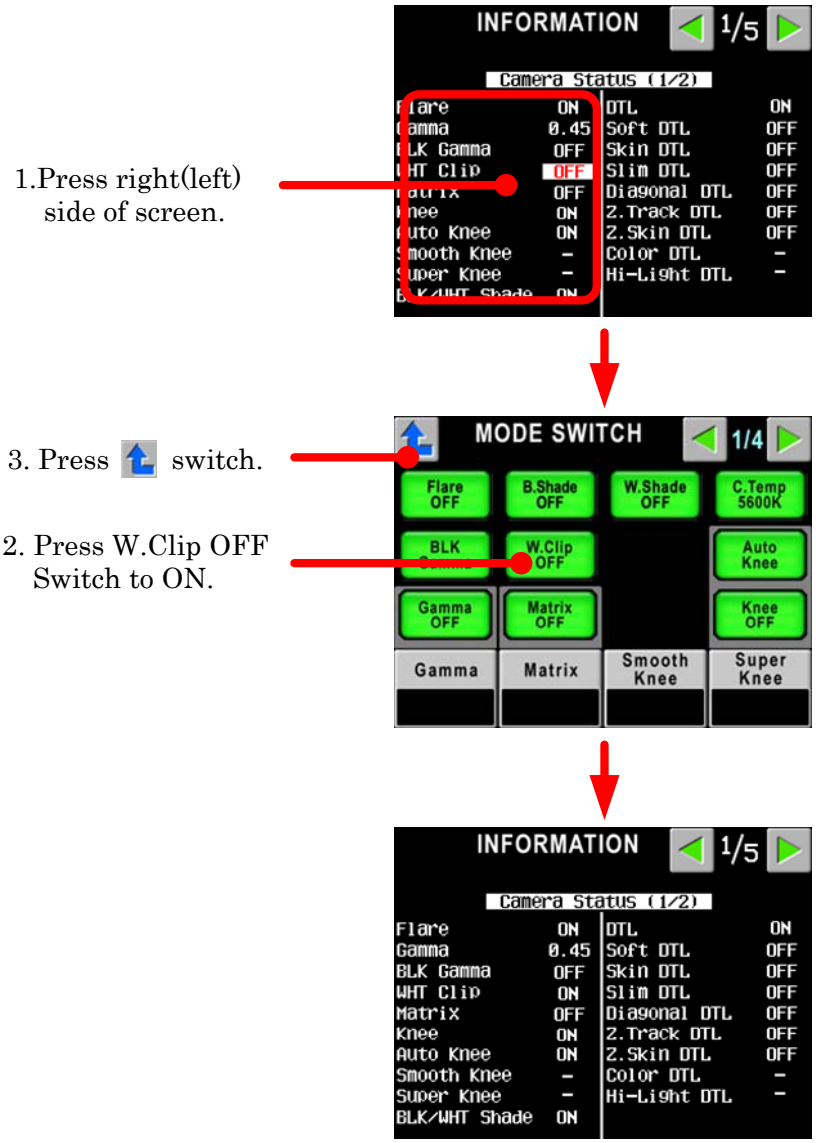



***Note*** Only available with equipment which supports command function.
When “SD-2G" is displayed behind OCP-200, the upper bound capacity is 2G byte. In the one not displayed, the upper bound capacity is 1G byte.

## 10.2 Direct jump function

Camera Status pages have direct jump function. LCD screen has touch switch function. By pressing right side or left side of screen, it can be direct jump to MODE SWITCH Control Page(SETUP). And it can be back to previous Camera Status display page from MODE SWITCH Page(SETUP) by pressing the switch once.

For instance, after checking WHT Clip OFF in Camera Status page, then, if you want to change to ON, press left side of LCD screen. The menu page will be direct jump to Page 1/4 of MODE SWITCH menu. And press WHT Clip to ON and press Switch to back to Camera Status page.




Left Side of Camera Status(1/2) will be jumped to MODE SWITCH(1/4) page,
Right Side of Camera Status(1/2) will be jumped to MODE SWITCH(2/4) page,
Right Side of Camera Status(2/2) will be jumped to MODE SWITCH(3/4) page,
Right Side of Camera Status(2/2) will be jumped to MODE SWITCH(4/4) page,
with each function groups.

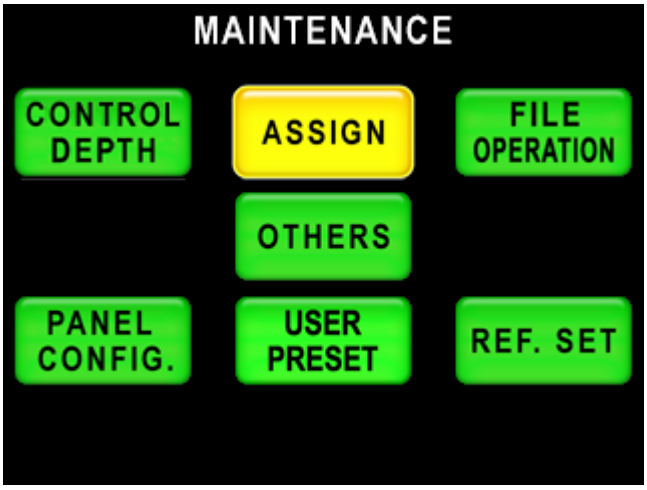
***Note*** In case of MODE SWITH page displayed by direct jump function, if Switch is pressed, the page will not back to Camera Status page. To move to Camera Status page, press INFO Switch on top side of the panel.

# 11. SETTING OF PANEL ASSIGN AND PROGRAM NUMBER

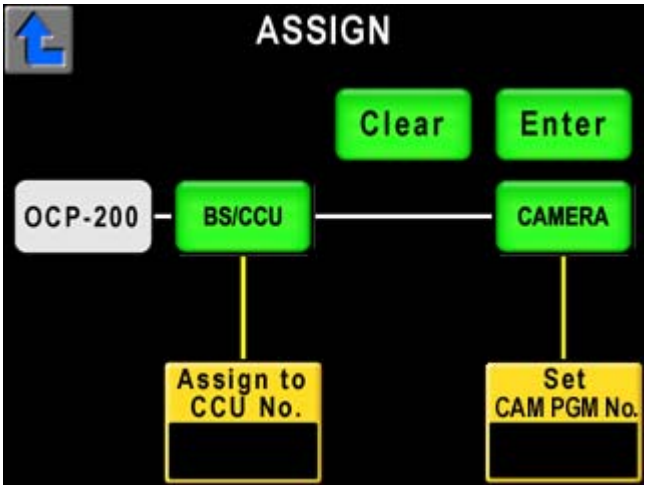
At the network connection, assignment of BS/CCU and control panel can be changed(Panel Assignment). Set BS/CCU no. And Program Camera No. can be changed.

## 11.1 Set-up steps


Press MAINTE Switch on top side of the panel to “ON”,




and press ASSIGN Switch on LCD screen.

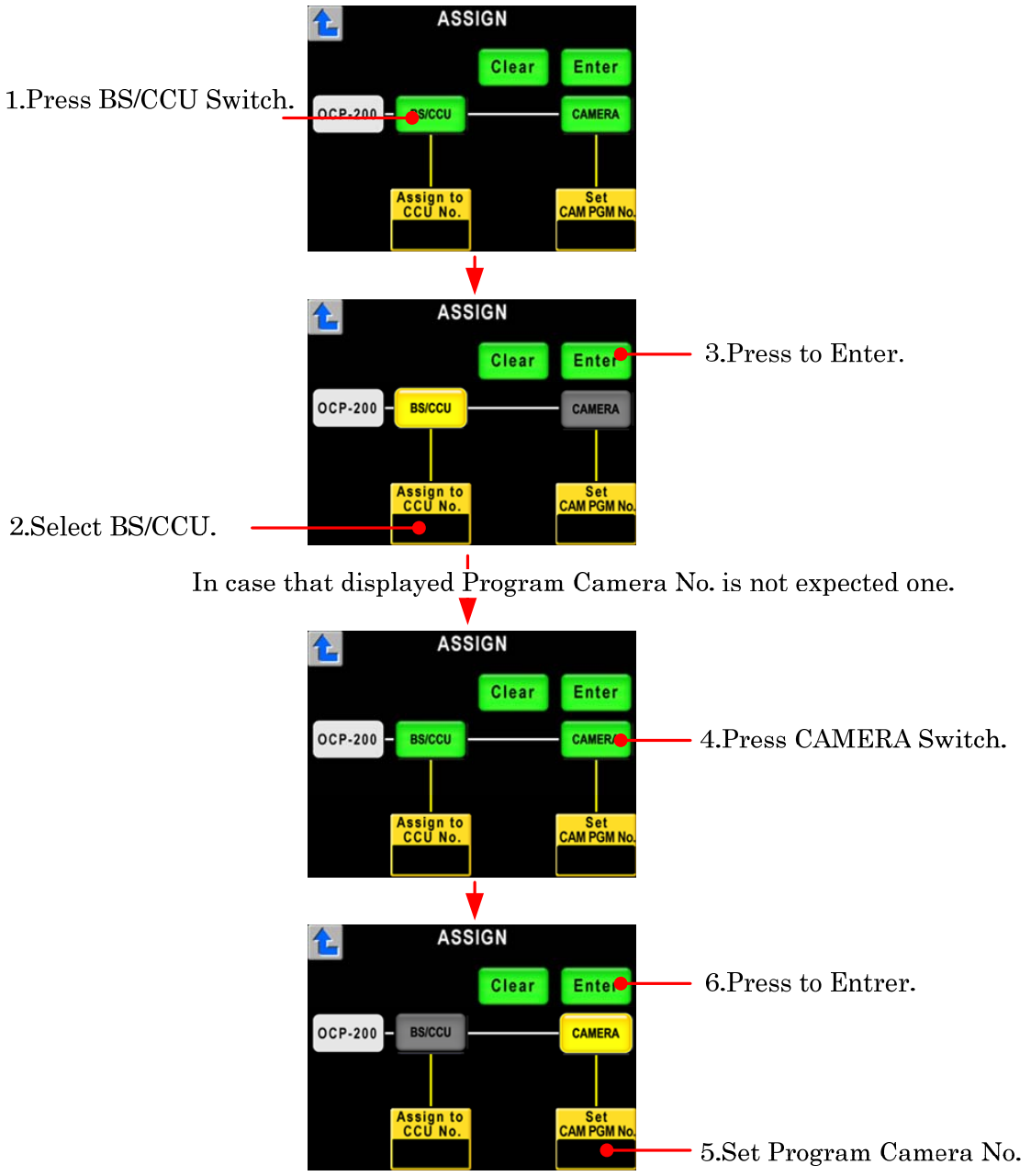



To change Program Camera No., press CAMERA switch. Or to change BS/CCU assignment (Panel Assignment Change), press BS/CCU switch.

If one of switch is pressed, it turns to amber color but another switch turns to gray color. Amber color of switch can be operated but gray color of switch is inhibited and it makes beep sound.

Press Clear switch to cancel the operation, or keep pressing Enter switch in 2 seconds to clear the inhibition. Then both Program Camera No. and BS/CCU assignment can not be set one time with Enter switch operation. Set either one individually.

Setting Procedure Sample)

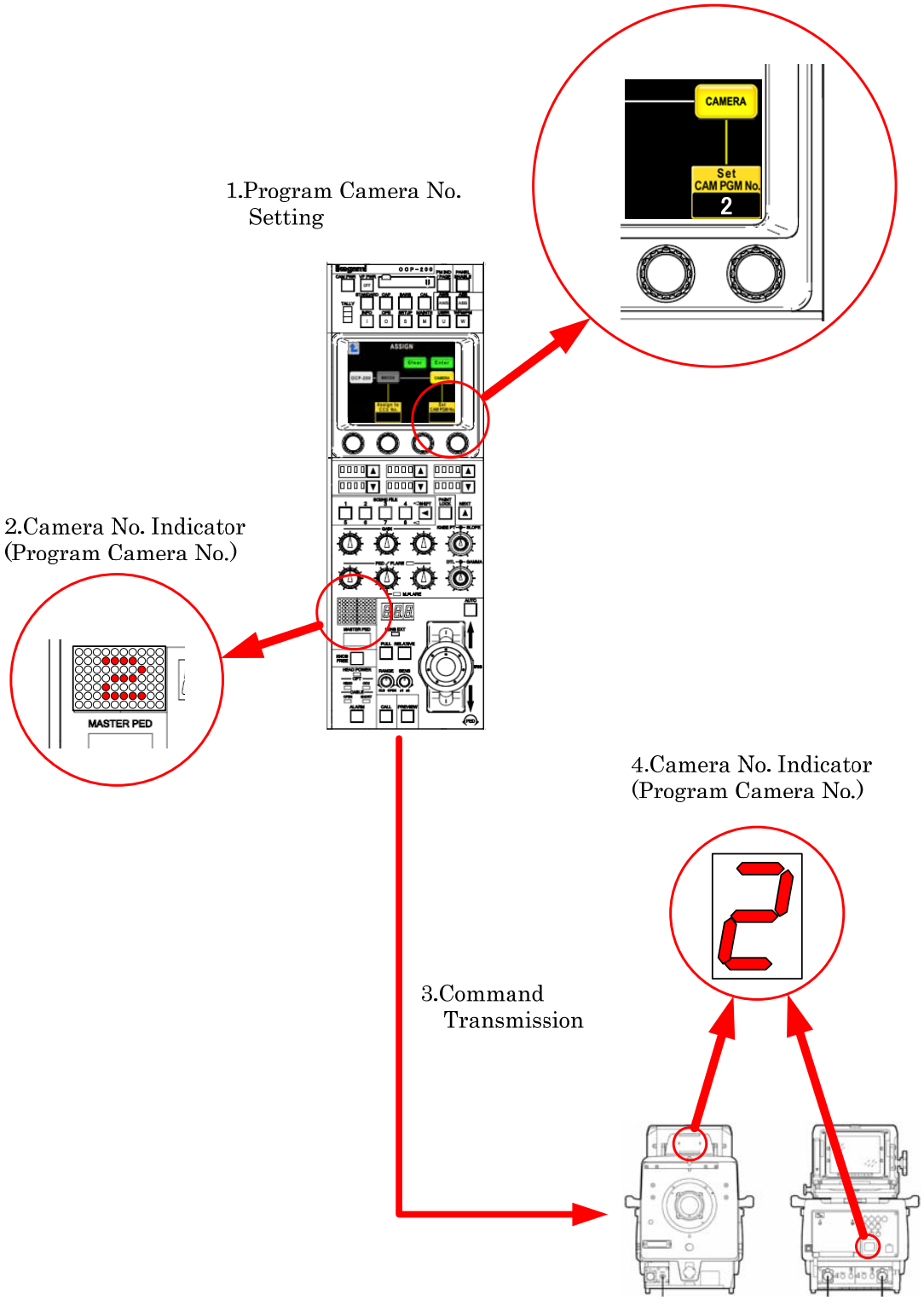



***Note*** BS/CCU No. corresponds to Network ID. About Network ID, In case of ICCP connection, only Program Camera No, can be set.

***Reference*** Refer to “CPH-200/BSH-200 Setup Manual” or manuals of the other equipment.

## 11.2 Program camera number

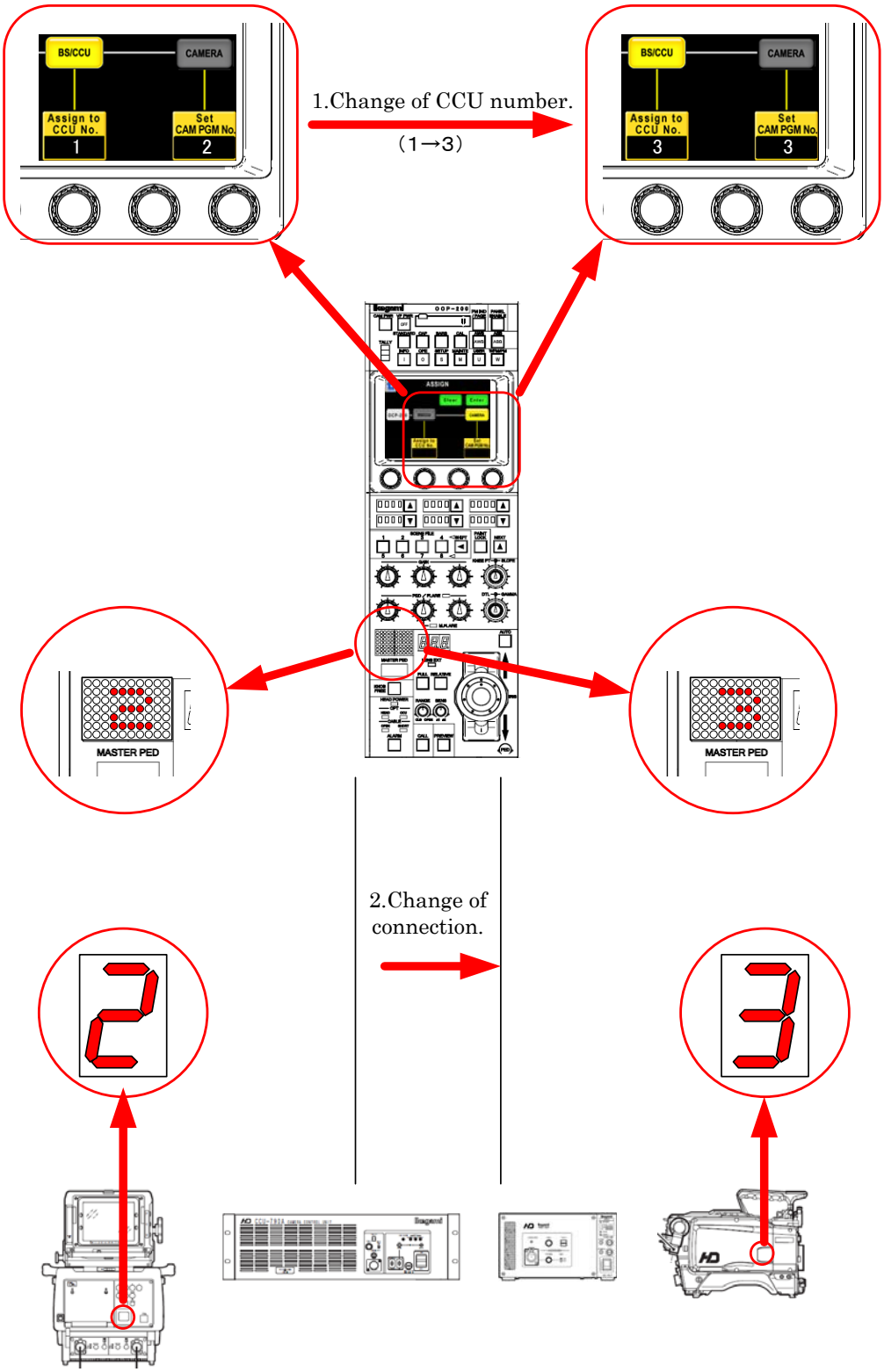
Program Camera No. which is decided for each TV program production can be set.
Set Program Camera No. will be reflected to Camera No. Indicator and will be sent to the Camera Head by the command and will be displayed on Camera No. Display on Camera Head.




***Note*** By setting Program No. OFF, Camera No. Indicator of both Camera Head and OCP can be set OFF.

## 11.3 Program camera number at panel assignment change

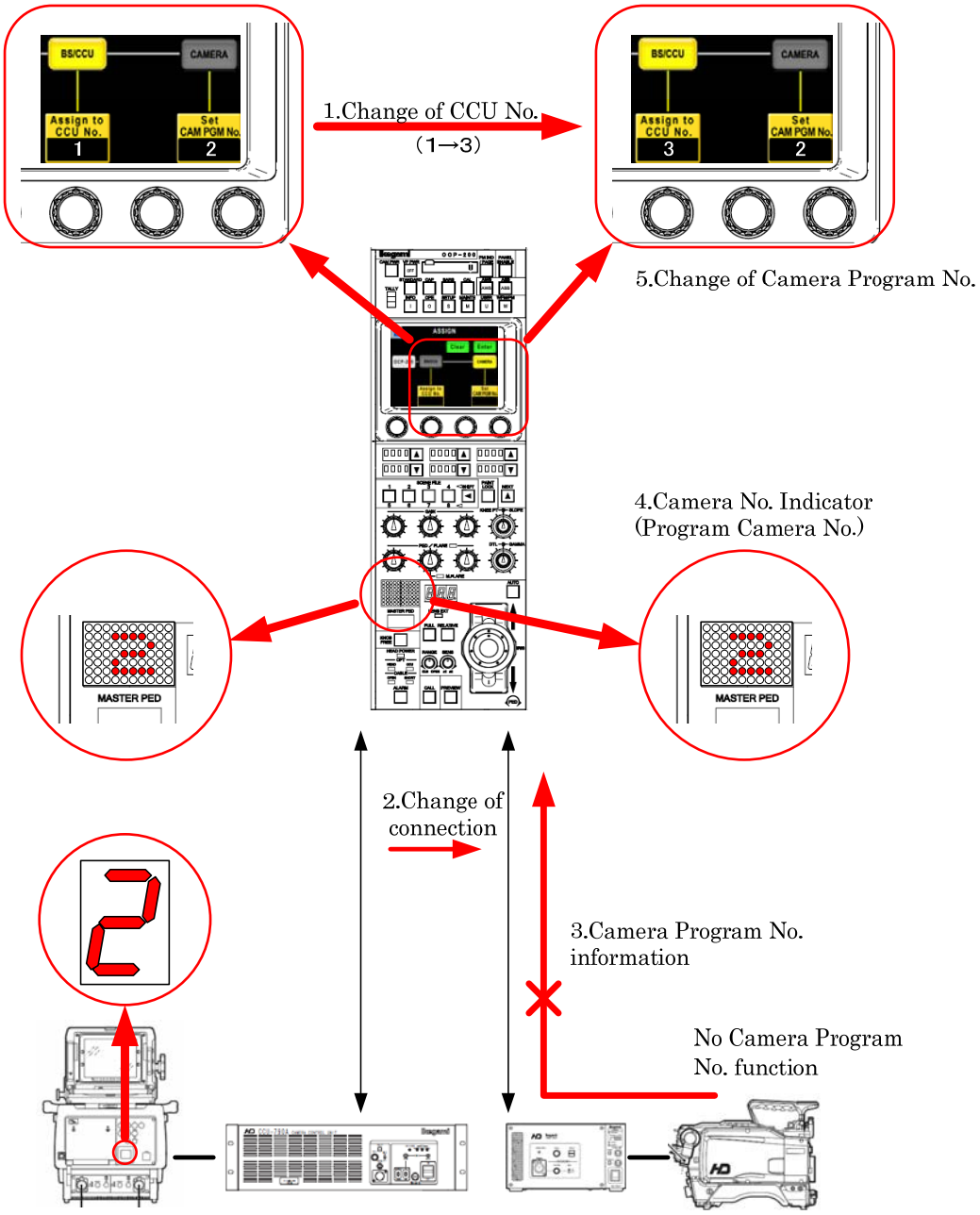
At the Panel Assignment change(command connection change with BS/CCU) or Triax/Fiber Cable connection change, Program Camera No. is sent from Camera Head to OCP and Program No. displayed on OCP is reflected from that of Camera Head.




***Note*** Program Camera No. function is to memorize Program Camera No. Program No, display function is to indicate Camera Program No.

## 11.4 Display mode of program camera number

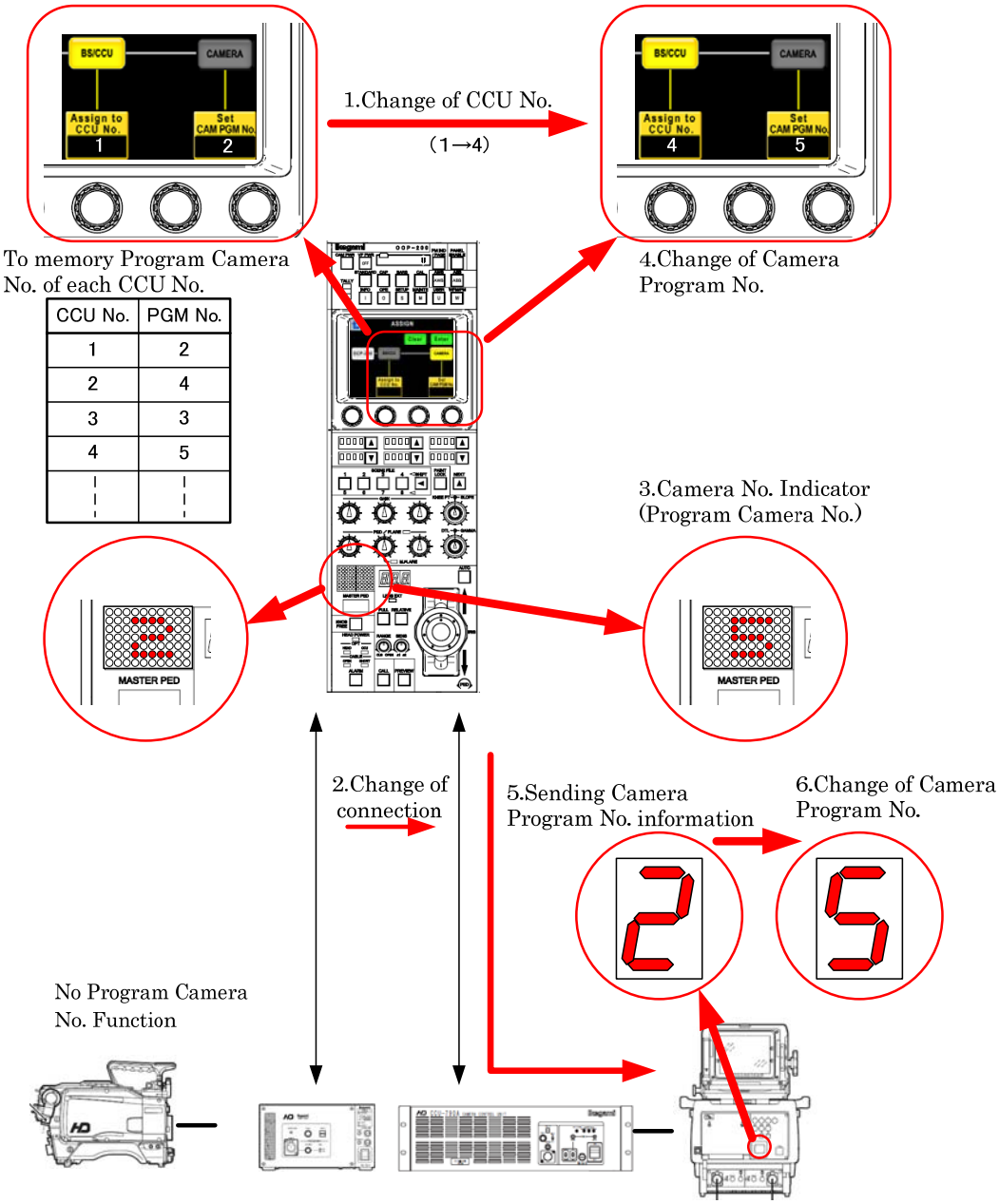
In case the Camera Head which doesn't have Program Camera No. function(No. can be memorized if it doesn't have display function.) is connected with the command connection, Program Camera No. will not be sent from Camera Head. Previous Program Camera No. will remain. Attention for the confusion with Program Camera No. setting of the other cameras.




In case of network connection only, BS/CCU connection setting(Assignment setting) can be corresponds to Camera Program No. Previous "11.3 Program camera number at panel assignment change" describes the action of CAM Mode, however, the action of Program Camera No. in Assignment setting works under Self Mode. Change of CAM Mode and SELF Mode is done by Panel Config. Menu.

***Reference*** Refer to "18. PANEL SETUP(PANEL CONFIG.)" for detail.

Under the SELF Mode, Camera Program No. on the Camera No. indicator on Control Panel is changed to memorized Camera No. and new camera no. will be sent to Camera Head at the assignment change.




| CCU No. | PGM No. |
|---|---|
| 1 | 2 |
| 2 | 4 |
| 3 | 3 |
| 4 | 5 |
| ⋮ | ⋮ |

- **CAM Mode(CAMERA has a priority)**

  Program Camera No. memorized in Camera Head has a priority for numbering under this mode. At the power on or at the assignment setup/change, based on answer from Camera Head, No. indication of Camera No. Indicator on OCP will be changed accordingly. If no answer received, memorized number by OCP is displayed.

- **SELF Mode(OCP has a priority)**

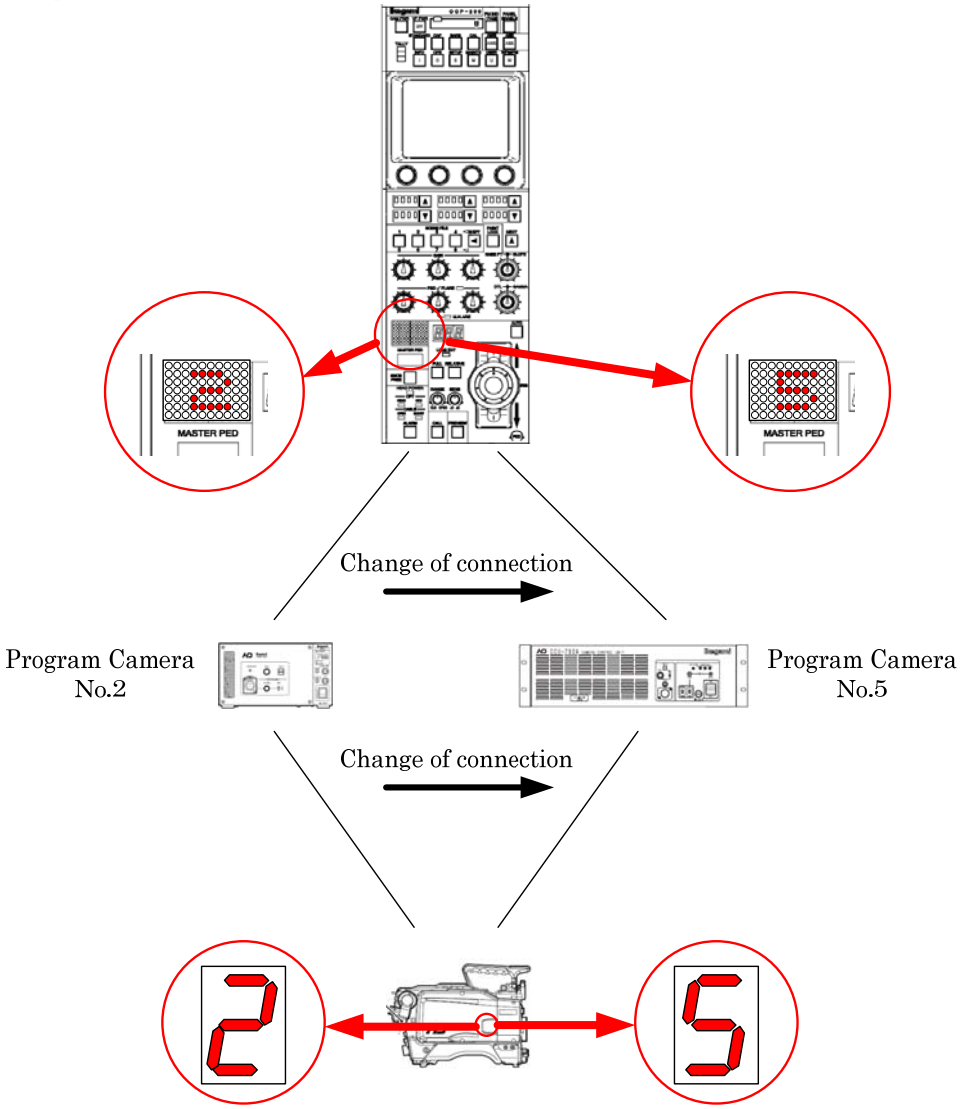
  Memorized Camera Program No. in OCP has a priority for numbering under this mode. At the power on or at the assignment setup/change, memorized Camera Program No. in OCP will be displayed on the Camera No. Indicator and the Command will be sent to the Camera Head.

- **FIX Mode**

  Only the display of the program number of OCP can be set regardless of the camera head and BS/CCU.

## 11.5 Program number function setting of CCU/BS

There is CCU/BS with the program number function. The program number function can be made effective by setting the menu of the CCU/BS. When OCP is connected with CCU/BS that makes the program number function effective, the number to which CCU/BS memorized the program number display is assumed to be priority. When OCP is connected with CCU/BS that makes the program number function effective, the display of the program number of OCP becomes a number that CCU/BS memorized. At the power on or at the assignment setup/change, based on answer from CCU/BS. When Cara Head is connected with CCU/BS, the display of the program number of Camera Head becomes a number that CCU/BS memorized.
The program number in which it is made to remember with CCU/BS can be set by operating OCP.




***Note*** Please make the program number function of CCU/BS effective when it wants to match the program number to the input of the system switcher etc. and to use it by you.

***CAUTION*** Please set the display mode of OCP to “CAM mode” when you make the program number function of CCU/BS effective. It is likely to malfunction when setting it to the “SELF mode”.

## 11.6 Display mode and program number function

The Program No. Indication is different between cameras which support Program Camera No. function or not. It should be decided to use either CAM mode or SELF mode by the condition of how often assignment change is done or cable connection change.
Please set effective/invalidity of the program number function of CCU/BS if necessary by meaning the program number in the user.
Default setting is CAM mode.

| Connection | Mode | Program Camera Number function | | compatibility |
|---|---|---|---|---|
| | | CCU/BS | Camera Head | |
| ICCP | CAM(CAMERA has a priority) | invalidity(Not Support) | Support | ◎ *1*2 |
| | | invalidity(Not Support) | Not Support | × *3 |
| | | effective | Support | ◎ *1*2*4 |
| | | effective | Not Support | ○ *1 |
| | SELF(OCP has a priority) | invalidity(Not Support) | Support | △ *4 |
| | | invalidity(Not Support) | Not Support | × *3 |
| NET | CAM(CAMERA has a priority) | invalidity(Not Support) | Support | ◎ *1*2 |
| | | invalidity(Not Support) | Not Support | × *3 |
| | | effective | Support | ◎ *1*2*4 |
| | | effective | Not Support | ○ *1 |
| | SELF(OCP has a priority) | invalidity(Not Support) | Support | ○ *1*4 |
| | | invalidity(Not Support) | Not Support | ○ *1 |

*1 Supports assignment between OCP and BS/CCU
*2 Supports assignment between BS/CCU and Camera Head.
*3 Indication of Number on the panel.
*4 Number will be different if new number is set by Camera Head side.

***CAUTION*** Please set the display mode of OCP to “CAM mode” when you make the program number function of CCU/BS effective. It is likely to malfunction when setting it to the “SELF mode”.

***Note*** Normally if the camera system is configured with all the camera has Program Camera Number function, CAM mode may be suitable. But, if the camera system includes some cameras which do not have Program Camera Number function, SELF mode may be suitable.
Program Camera No. function is the function to memory Program Camera No. And Program Camera No. indication function is to indicate the number.

# 12. CONTROL DEPTH SETTING

## 12.1 Outline

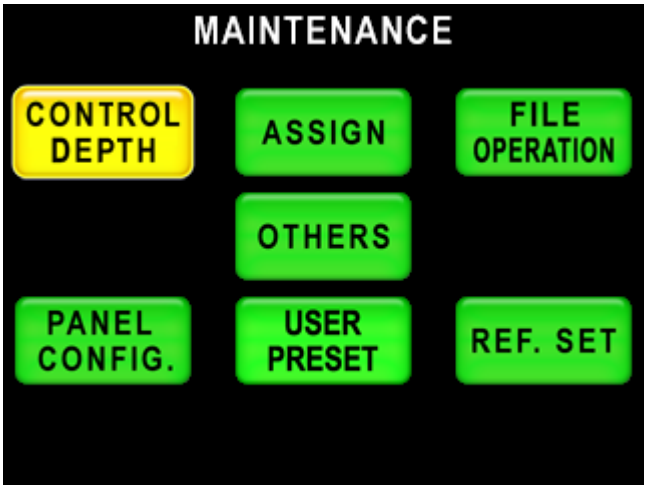
Control Depth of OCP-200 can be set for below four levels.
Control depth setting is protected by password.

① **Basic** : like RM-11. Operation Menu in LCD Display is disable.
② **Standard** : like OCP-790.
③ **Extended** : like OCP + MCP, excluding engineering only functions.
（Excluding System Control, Reference File Creation, and Control Panel detail Setting）
④ **Complete** : no restrictions.

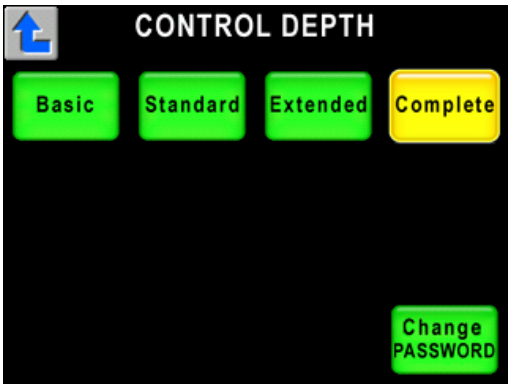
## 12.2 Setting procedure of CONTROL DEPTH

Push the MAINTE Switch from the FUNCTION Switches in the upper part of the LCD.

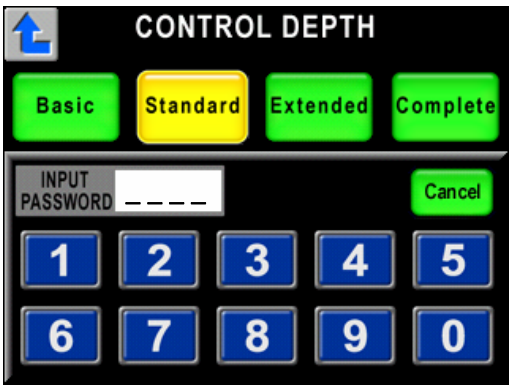

By pressing CONTROL DEPTH Switch, below screen will come up.



Default setting is selected for COMPLETE and full function can be operated.
To return MAINTENANCE page, push symbol .




To change the control depth, select Basic, Standard, Extended, Complete icons.
The following password input screen will come up.

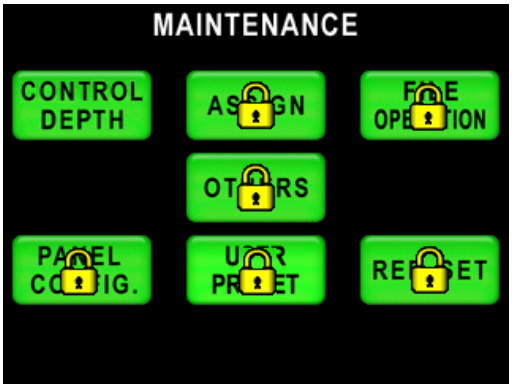



Input password of four numerals, each of Control Depth can be selected if the input password is correct. In case of incorrect password, the input field will be cleared. To clear password input page, push Cancel Switch to back to previous operating page without Control Depth change.

∗ **Default Password is [ 0 ][ 0 ][ 0 ][ 0 ].**

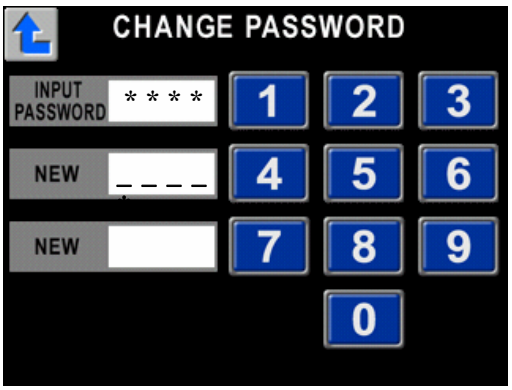
When above password input page is displayed, switches and icons for LCD page change are disabled.

The symbol of Lock mark is displayed on the icons of prohibited functions. If the prohibited icon is pushed, buzzer beeps and operation is disenabled. And prohibited hard switch is pushed, it reacts the same.



## 12.3 Changing the password

The following screen will come up when Change PASSWORD icon in CONTROL DEPTH screen is pushed




If you input current password of four numerals (factory default password is [0] [0] [0] [0]), and input password is correct, you will be able to change to new password. To confirm new password, input new password into bottom input field again. After completing those new password input, it will return to the CONTROL DEPTH screen.

If wrong password is input, input field will be cleared.

To return to the CONTROL DEPTH screen without inputting a password, push switch.

And related operation for the change of LCD pages is prohibited, except switch. when this page is active.

***CAUTION*** Please note that the operation of the switch that relates to the LCD switches other than is prohibited while displaying this screen.

***Note*** At the emergency situation to release control limitation if Password is forgotten or the person in charge is out, the setup can be cleared to back default setting.

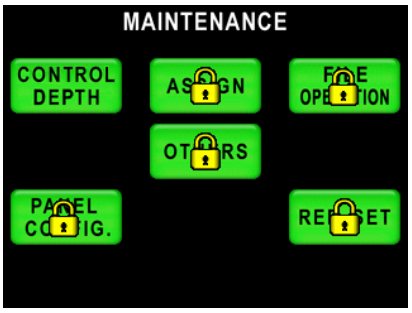
***Reference*** Refer to “20.3 Initial Factory Setting” for detail operation procedure.

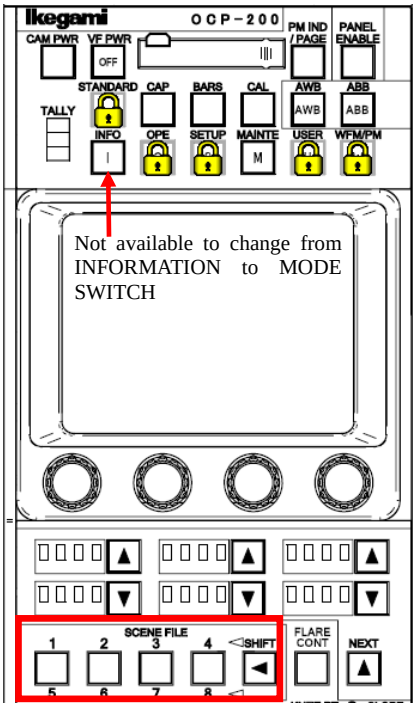
## 12.4 The details of CONTROL DEPTH

| Function Switch | Icons | Basic | Standard | Extended | Complete |
|---|---|---|---|---|---|
| INFORMATION | ----- | *1 | *1 | OK | OK |
| OPERATION | ----- | N/A | OK | OK | OK |
| CAMERA SETUP | GRAY SCALE | N/A | N/A | OK | OK |
| | DETAIL | N/A | N/A | OK | OK |
| | DOWN CONV. DETAIL | N/A | N/A | OK | OK |
| | COLOR | N/A | N/A | OK | OK |
| | DOWN CONV. COLOR | N/A | N/A | OK | OK |
| | CHARACTER | N/A | N/A | N/A | OK |
| | MODE SWITCH | N/A | N/A | OK | OK |
| | AUTO SETUP | N/A | OK | OK | OK |
| MAINTENANCE | CONTROL DEPTH | OK | OK | OK | OK |
| | ASSIGN | N/A | OK | OK | OK |
| | FILE OPERATION | N/A | N/A | OK | OK |
| | OTHERS | N/A | N/A | N/A | OK |
| | PANEL CONFIG. | N/A | N/A | N/A | OK |
| | USER PRESET | N/A | N/A | N/A | OK |
| | REF. SET | N/A | N/A | N/A | OK |
| USER FUNCTION | ----- | N/A | N/A | OK | OK |
| STANDARD SET | ----- | N/A | N/A | N/A | OK |
| WFM / PM | ----- | N/A | OK | OK | OK |
| MAN. SET / CLR | MANUAL SET | N/A | N/A | OK | OK |
| | MANUAL CLEAR | N/A | OK | OK | OK |
| ALARM | ----- | OK | OK | OK | OK |
| SCENE FILE STORE | ----- | N/A | OK | OK | OK |

※1 Direct Jump is inhibited to MODE SWITCH.

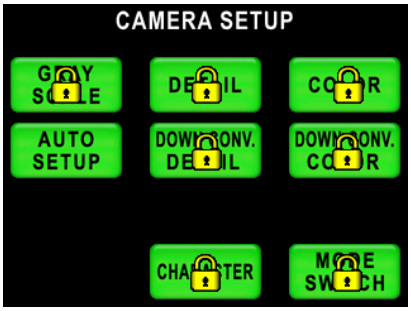
## ① Basic

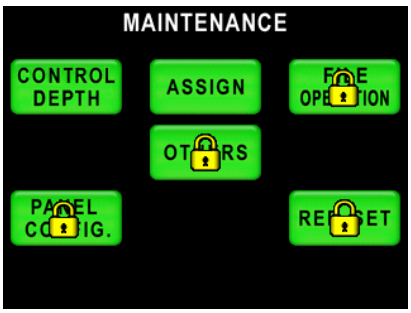


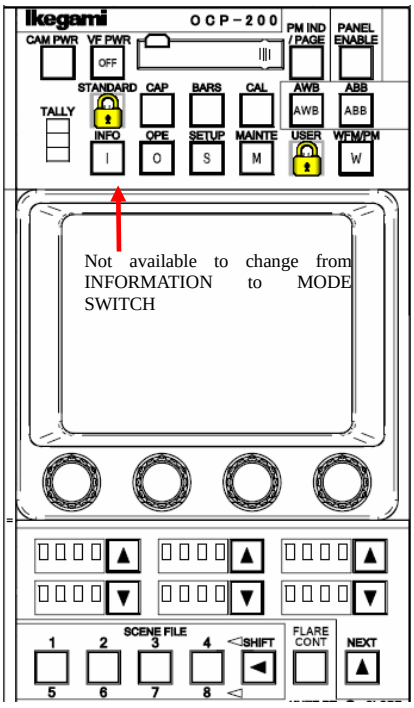




＊Can not store SCENE FILE.

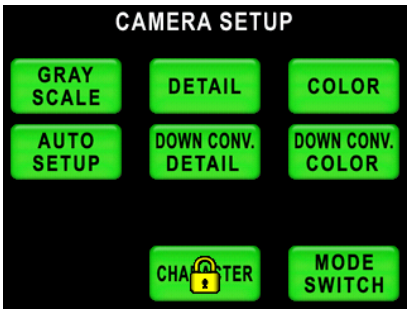
## ② Standard

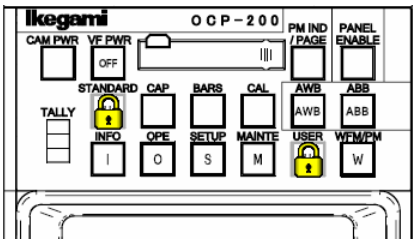


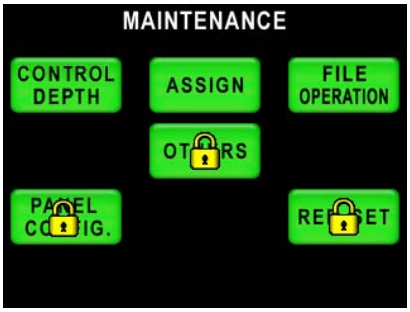




### ③ Extended



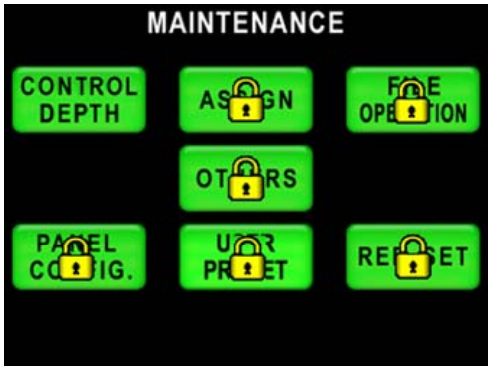



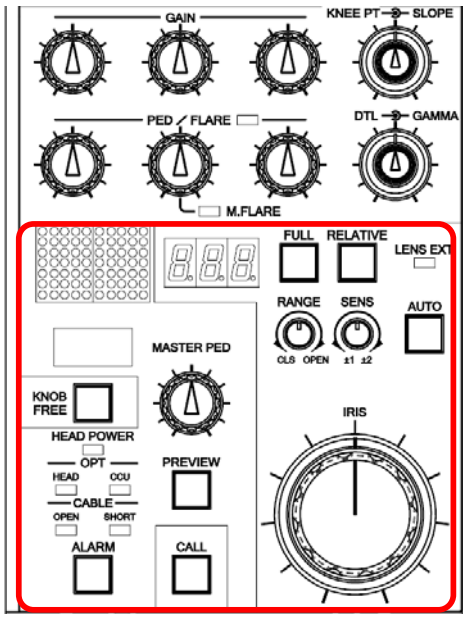

### ④ Complete

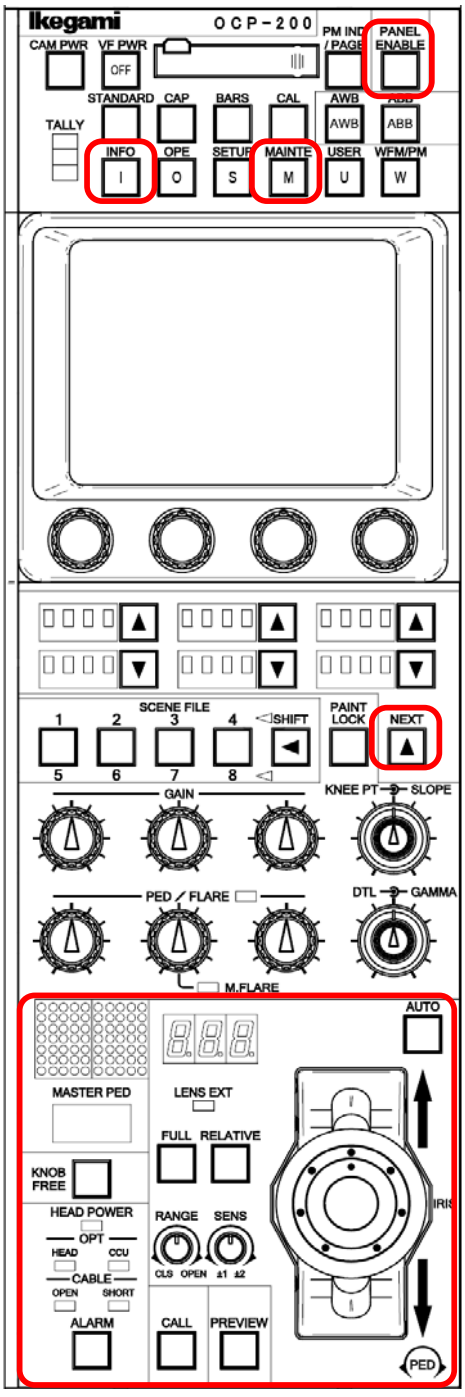
No restriction.

## 12.5 Iris and mastering pedestal operation limitation function

The range of the operation can be limited to a minimum item necessary for the operations such as irises and the mastering pedestals by setting Panel Config. The operation range setting function becomes effective as for the setting only at “Basic".
The range of the operation becomes it in the frame shown by the following.




***Reference*** Refer to “18. PANEL SETUP(PANEL CONFIG.)” for detail.

# 13. STANDARD FUNCTION

## 13.1 Outline

"STANDARD" Function will clear current setting of Camera Head and BS/CCU and back to standard setting by Control Panel operation. OCP-200 has two modes of Standard Function. They are "Clear to Standard" and "Recall Preset File".
"Clear to Standard" function sends existing commands for each control item.
"Recall Preset File" function sends new exclusive command to recall preset setting.

### 1) Clear to Standard

"Clear to Standard" function sends existing commands from OCP-200 for each control item in order to back Camera to standard setting. Then control item to be backed to standard setting is limited to be controlled from OCP-200.
If the special function is ON, that will be turned OFF forcibly by this function. Control data is cleared by being sent Manual Clear commands for each control item. Control parameters are back to the condition of Auto Set-up execution completed or the condition of Manual Set execution completed.

"Clear to Standard" function has two modes, Basic and Complete.

- Basic Mode
  To back to standard setting related to video and color level setting.
- Complete Mode
  To back phase setting and system related items in addition to Basic control items.

By the processing to send commands for each item, Standard function is available for Camera Head or BS/CCU which doesn't have Preset File function.

***CAUTION*** Controllable items of Standard Function are decided by the specification of OCP. This function doesn't guarantee to cover latey developed function in the future. And some control items added by customer specification can not be backed to standard setting.

***Note*** A standard setting can be changed about a part of function.

***Reference*** Refer to "18. PANEL SETUP(PANEL CONFIG.)" for detail.

<Table of Clear to Standard function>

Basic Mode Function (1/2)

| Function | Clear to | Manual Clear functions |
|---|---|---|
| CAP | OFF | |
| SCENE FILE | OFF | |
| DIAGNOS | OFF | |
| FILE TRANSFER | OFF | |
| AUTO FUNCTIONS | OFF | |
| SUPER PED | OFF | |
| TEST PULSE | OFF | |
| BARS | REMOTE ON<br>OFF | |
| AWB | REMOTE ON<br>AWB ON,<br>AWB A channel | |
| SUPER V | OFF | |
| AUTO COLOR SETUP CHART | OFF | |
| DIASCOPE | OFF | |
| BLACK STRETCH/PRESS | OFF | |
| MENU | OFF | |
| STEP GAIN | 0 dB | R/G/B GAIN |
| GAIN WOBBLING | OFF | R/G/B/MASTER PED, R/G/B BLACK SET |
| BLACK SHADING | ON | R/G/B H/V/SAW/PARA BLACK SHADING |
| WHITE SHADING | ON | R/G/B H/V/SAW/PARA WHITE SHADING |
| FLARE | ON | R/G/B FLARE |
| GAMMA | 0.45 | R/G/B/MASTER GAMMA |
| BLACK GAMMA | OFF | R/G/B/MASTER BLACK GAMMA |
| KNEE | ON | R/G/B/TOTAL KNEE POINT<br>R/G/B/TOTAL KNEE SLOPE |
| AUTO KNEE | ON *1 | R/G/B/TOTAL KNEE POINT,<br>R/G/B/TOTAL KNEE SLOPE |
| SUPER KNEE | OFF | |
| SMOOTH KNEE | OFF | |
| WHITE CLIP | ON | R/G/B WHITE CLIP |
| DTL | ON | DTL GAIN, DTL Freq, DTL B/W Bal,<br>DTL EDGE Bal, DTL THRESH, FINE DTL |
| SOFT DTL | OFF | WHT SUP, BLK SUP |
| SKIN DTL | OFF | R/B HUE, SKIN DTL GAIN |
| SLIM DTL | OFF | |
| DIAGONAL DTL | OFF | |
| COLOR DTL | OFF | COLOR DTL GAIN, PHASE, FINE, WIDTH 1/2 |
| ZOOM TRACK DTL | OFF | ZOOM TRACK DTL |
| ZOOM TRACK SKIN DTL | OFF | ZOOM TRACK SKIN DTL |
| NOISE SUP | ON | DTL NOISE SUP |
| HI-LIGHT DTL | OFF | GAIN, LIMIT |
| MATRIX | OFF *1 | R-G, R-B, G-R, G-B, B-R, B-G |
| MATRIX SELECT | 1 *1 | |
| COLOR CORRECTOR | OFF | R/Yl/G/Cy/B/Mg Hue, Sat |

*1 A standard setting can be changed.

Basic Mode Function (2/2)

| Function | Clear to | Manual Clear functions |
|---|---|---|
| SHUTTER | OFF | |
| VARIABLE SUTTER | OFF | VARIABLE SHUTTER |
| IRIS REMOTE | ON | |
| AUTO IRIS | ON*1 | PEAK, LEVEL |
| CHROMA | ON | |
| COLOR SATURATION | OFF | COLOR SATURATION, COMB FILTER |
| ZOOM/FOCUS REMOTE | OFF | ZOOM, FOCUS |
| CUSTOM COLOR 1 | OFF | HUE, SAT, VAL, DTL, PHASE,<br>FINE, WIDTH 1/2, ADH X/Y |
| CUSTOM COLOR 2 | OFF | HUE, SAT, VAL, DTL, PHASE,<br>FINE, WIDTH 1/2, ADH X/Y |
| COLOT MATCH | OFF | |
| C TEMP 5600K | OFF | |

*1 A standard setting can be changed.

Complete Mode Function(Including Basic Mode)

| Function | State | Manual Clear functions |
|---|---|---|
| SC PHASE | | SC CR、 SC FINE |
| H PHASE | | H PHASE |
| MIC GAIN REMOTE | OFF | MIC GAIN |
| VIDEO LEVEL | | |
| SD TRIAX | | TA_LVL Y/Cb/Cr,BS_LVL Y/Cb/Cr |
| HD TRIAX | | TA_LVL Y/Pb/PR,,TA_BLK Y/Pb/Pr |
| SDTV ASPECT | 4:3 *1 | |

*1 A standard setting can be changed.

### 2) Recall Preset File

"Recall Preset File" function sends new exclusive command from Control Panel to recall Preset File previously stored in back-up memory.

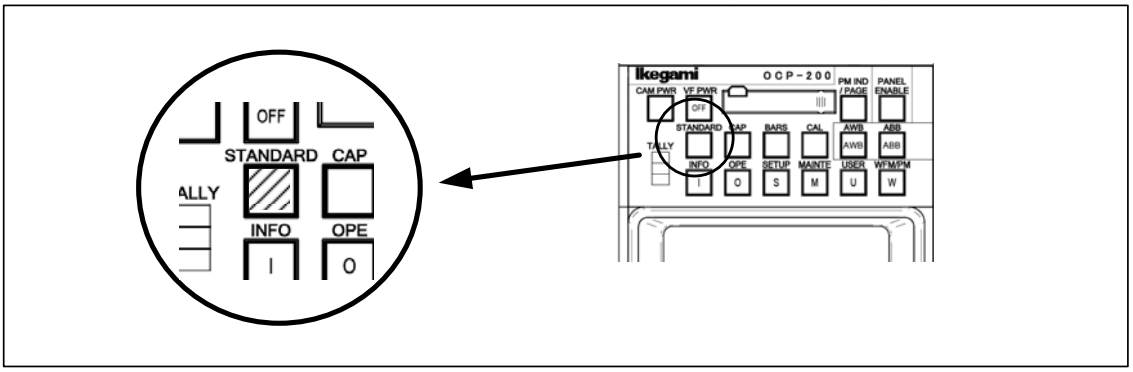
There are Factory Data and User Data in Preset File, but some of Camera Head and BS/CCU doesn't have the Preset File function. Read-out from Preset File is done with each Camera Head and BS/CCU separately.

***CAUTION*** This function is available for the Camera Head and BS/CCU which has capability to the exclusive command. Factory Data is the default setting, it can not be overwritten by the user operation.

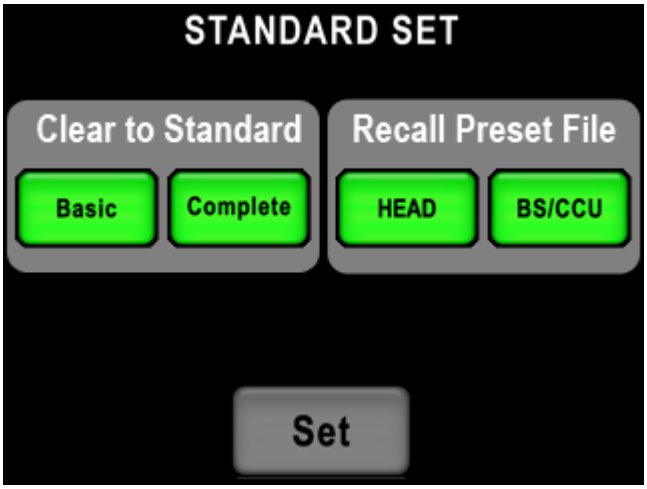
***Reference*** Refer to Operation Manual of Camera Head or BS/CCU for storing procedure to save User Data to Camera Head and BS/CCU.

## 13.2 Operating Procedure

Press “STANDARD” switch in Function Switches on top side of the panel.

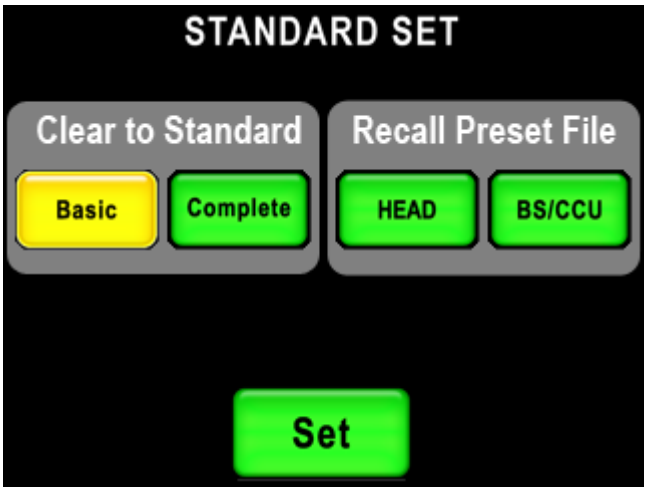



Below menu page comes up, and either Clear to Standard function or Recall Preset File function can be selectable.

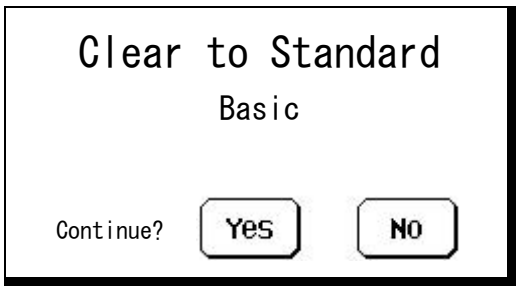



### 1) Clear to Standard

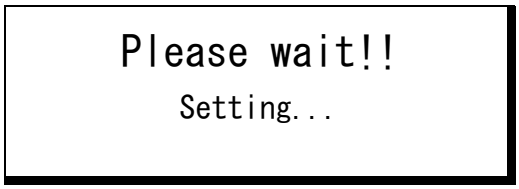
Either Basic mode or Complete mode is selectable in Clear to Standard function.



"Set" the mode to turn Green if Control Item is selected. Press "Set" switch to appear "Pop-up Window" for the confirmation. If "No" is pressed, the menu will back to previous page without execution.




Press "Yes" to start execution.

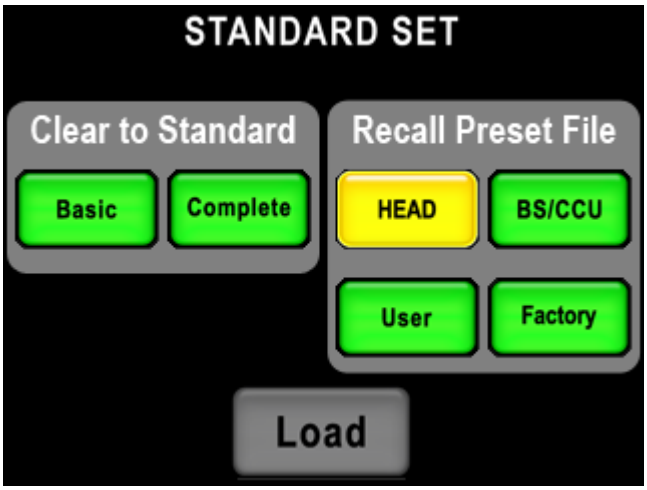



Pop-up window comes up until the execution completed to show processing going on.

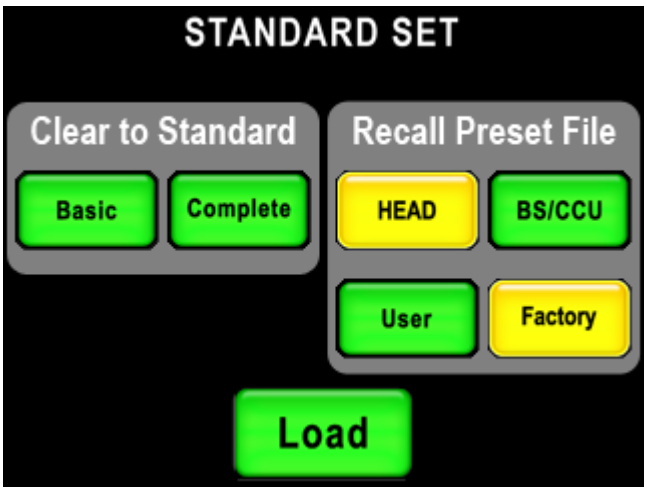
***Note*** It will take around 5 seconds for the processing because of sending each commands sequentially. If any control is done by another Control Panel connected in parallel on the processing, Standard Function may not work correctly.

### 2) Recall Preset File

Recall Preset File function can read out the preset file and HEAD and BS/CCU individually.

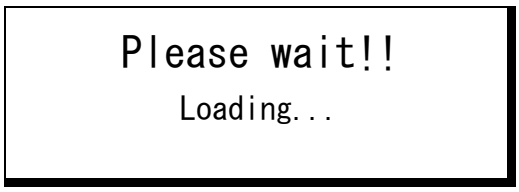



The switch of User and Factory appears downward when the item is selected.
Whether the user data is read or the factory data is read can be selected.
The switch becomes gray when the function is not provided and it is not possible to select it




"Set" the mode to turn Green if Control Item is selected. Press "Set" switch to appear "Pop-up Window" for the confirmation. If "No" is pressed, the menu will return to previous page without execution.


Press "Yes" to start execution.




Pop-up window comes up until the execution completed to show processing going on.

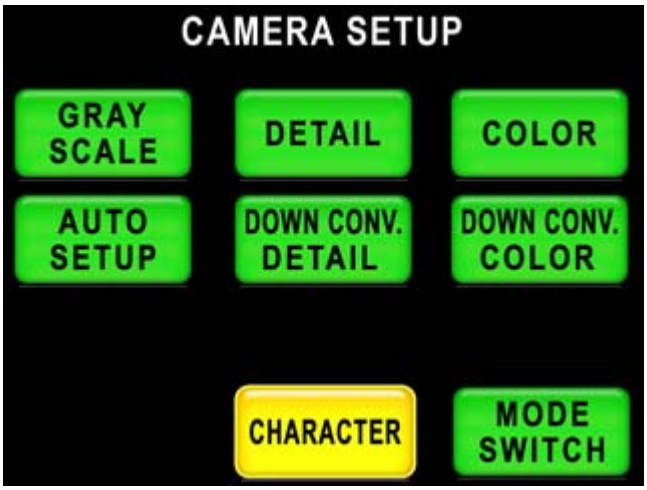
Camera Head or BS/CCU sometimes doesn't accept Recall Preset File command by any reason, if the execution is attempted. In that case, Pop-up window will come up for attention. Press "OK" to confirm to continue the execution.


If error occurs in Preset File Loading, Pop-up window will come up for attention. Press "OK" to confirm to continue the execution.

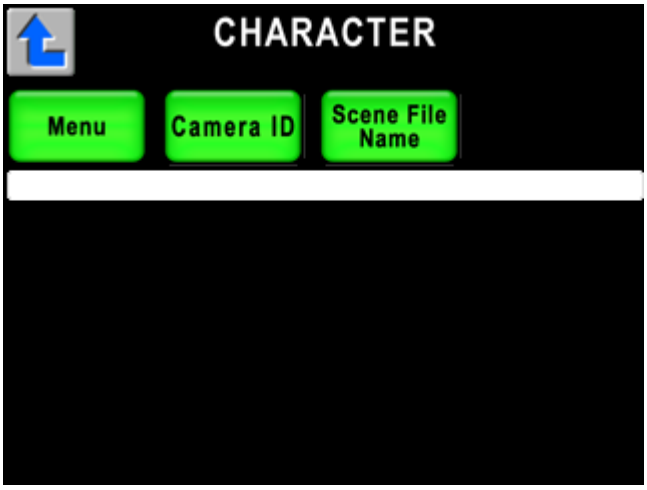

***CAUTION*** After Preset File loading, Camera Head and/or BS/CCU may be reset automatically for initialize. In that processing, OCP may be Panel Enable off or LCD screen off, but OCP is NOT in trouble. This is correct reaction because of unlocked command.

# 14. CHARACTER SETUP

Press “SETUP” switch in Function Switches on top side of the panel.




By pressing “CHARACTER” Switch,

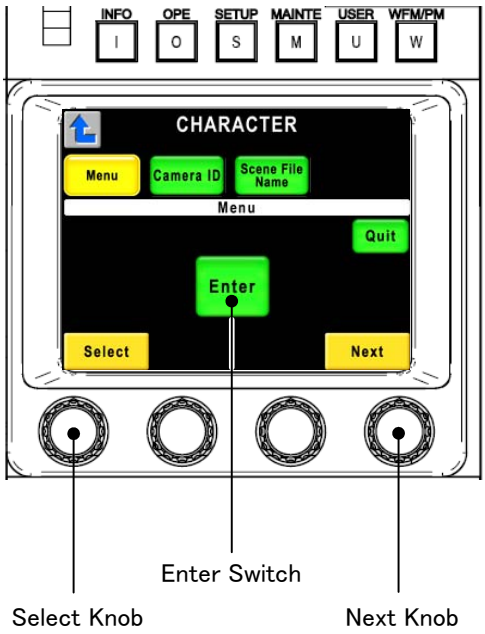



- Camera Menu
- BARS TITLE
- Camera ID
- Scene File Name

…can be setup.

## 14.1 Camera Menu Setup

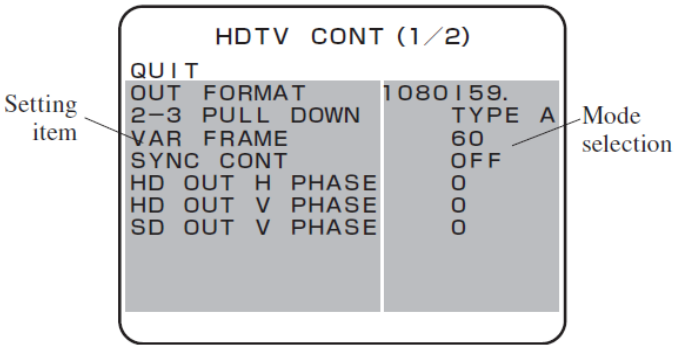
OCP−200




1. Press Menu Switch a couple of seconds. Main Menu will come up. In case of BS/CCU is connected, Menu of BS/CCU will be controllable. Menu of Camera Head will be controllable when Camera Head is connected directly.

```
*** CCU-790A MENU ***
QUIT
BARS TITLE
HDTV/DC/UC CONT
RET VIDEO FORMAT
INFORMATION
OTHERS
    --- OPE.  GUIDE ---
 SELECT    :   [SEL]  KNOB
 SELECT    :  [NEXT]  KNOB
 ENTER     :  [ENTER]  KEY
```

2. Rotate Select Knob or Next Knob to set blinking cursor to setting target and push Enter switch. Sub menu will come up.




3. Rotate Select Knob or Next Knob to set blinking cursor to setting target and push Enter switch. Blinking cusor will move to Mode Selection Field.

4. Rotate Select Knob or Next Knob to select the mode. Some setting items of are changed with Knob Rotation and The other setting items are entered by pushing Enter switch.

5. After all the setting is entered, Menu page should be closed.
   The procedures are;
   - Select and enter QUIT on PM screen by Menu control.
   - Push Quit switch on LCD
   - Push one of Function Switch on the top side of panel.

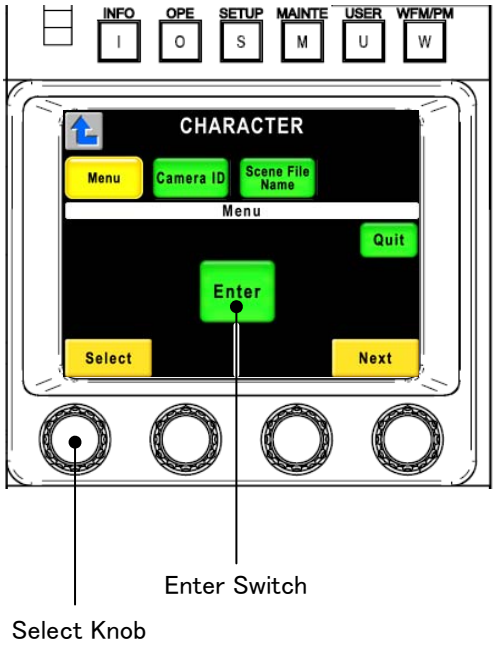
*Note* If it is not BARS ON, the menu is not displayed by the model of the camera head and BS/CCU.

## 14.2 BARS TITLE Entry

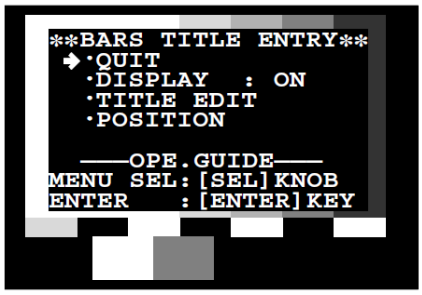
As per procedure of “14.1 Camera Menu Setup”, select “BARS TITLE” in Camera Menu.

### 1) Character ON/OFF selection of “BARS TITLE”

OCP-200

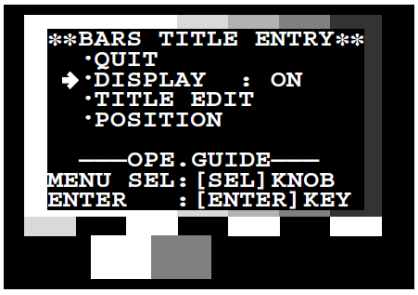



1. Select BARS TITLE from Main Menu to indicate BARS TITLE entry page on PM.



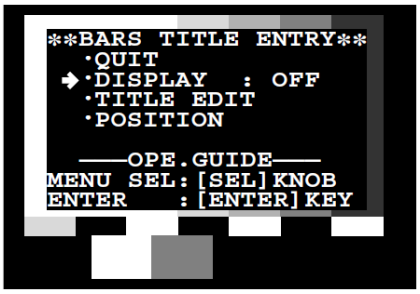

BARS TITLE ENTRY display

2. Rotate Select Knob to select "DISPLAY".




DISPLAY selected

3. Push Enter Switch to indicate ON/OFF selection mode, current setting(ON or OFFF) will blink.



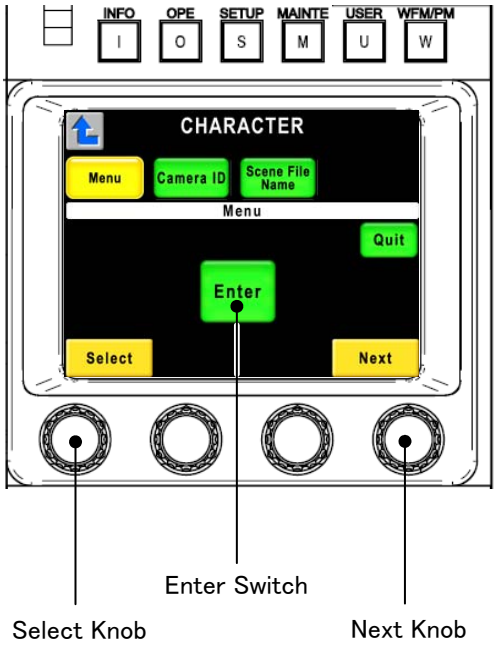

ON/OFF selecting mode

4. Rotate Select Knob to change ON/OFF setting.

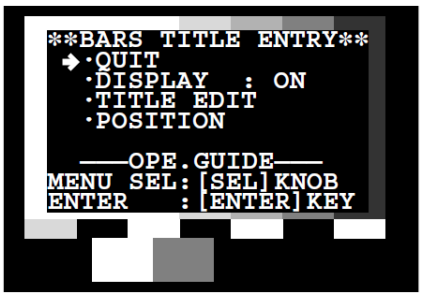
5. Press Ener Switch to leave from ON/OFF selection mode.

**2) Editing of “BARS TITLE”**

OCP-200

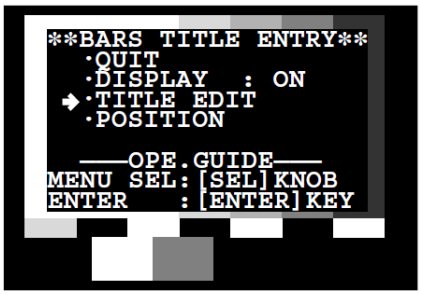



1. Select BARS TITLE from Main Menu to indicate BARS TITLE entry page on PM.



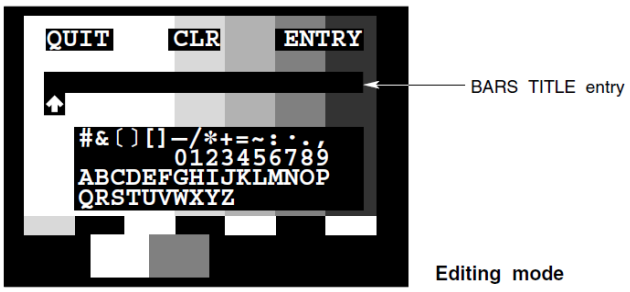

BARS TITLE ENTRY display

2. Rotate Select Knob to select "TITLE EDIT".




TITLE EDIT selected

3. Push Enter Switch to indicate Edit Mode Page and Page will be changed.




Editing mode

4. In this page, functionality of Select Knob, Next Knob and Entry Switch on LCD shows below;

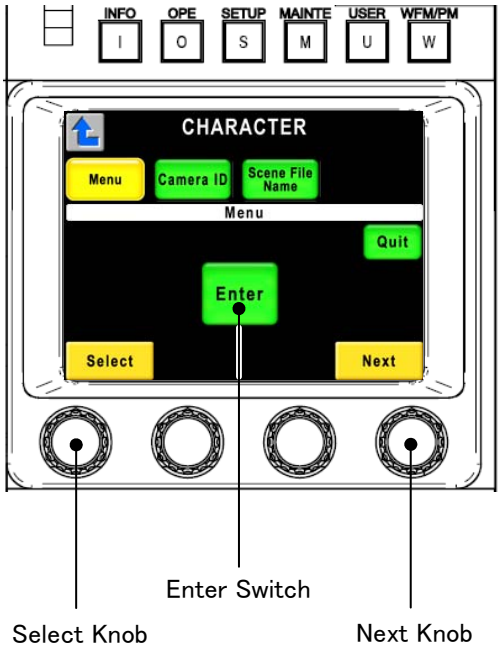
- Select Knob : Select character to be input.
- Next Knob : Set the poition for character entry, or select "QUIT", "CLR", "ENTRY".
- Enter Knob : Will be activated when "QUIT", "CLR" or "ENTRY" are selected by Iris Control.

5. By pressing Enter Switch, the action of below switches works as following.

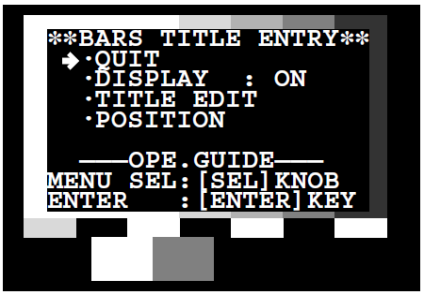
- [QUIT] : To become invalid Entered or Edited BARS TITLE, and leave from Edit mode(Previous BARS TITlE setting remainds).BARS TITLE
- [CLR] : To clear all BARS TITLE.
- [ENTRY] : To save entered and edited BARS TITLE, and leae from Edit mode. BARS TITLE are updated and displayed after the entry.

### 3) Character Location setting of “BARS TITLE”

OCP-200

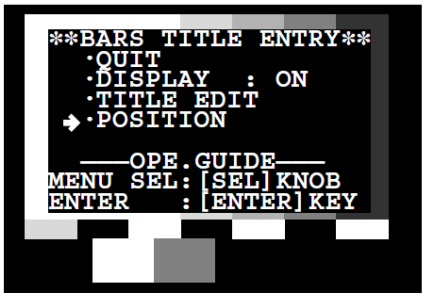



1. Select BARS TITLE from Main Menu to indicate BARS TITLE entry page on PM.



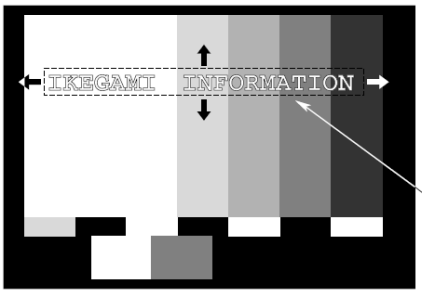

BARS TITLE ENTRY display

2. Rotate Select Knob to select "POSITION".




Display position setting mode (POSITION selected)

3. Push Enter Switch to indicate Position Setup Mode Page and Page will be changed.




BARS TITLE position

The title registered in [ Editing BARS TITLE Characters ] is displayed on the color bars.

4. In this page, functionality of Select Knob, Next Knob and Enter Switch shows below.

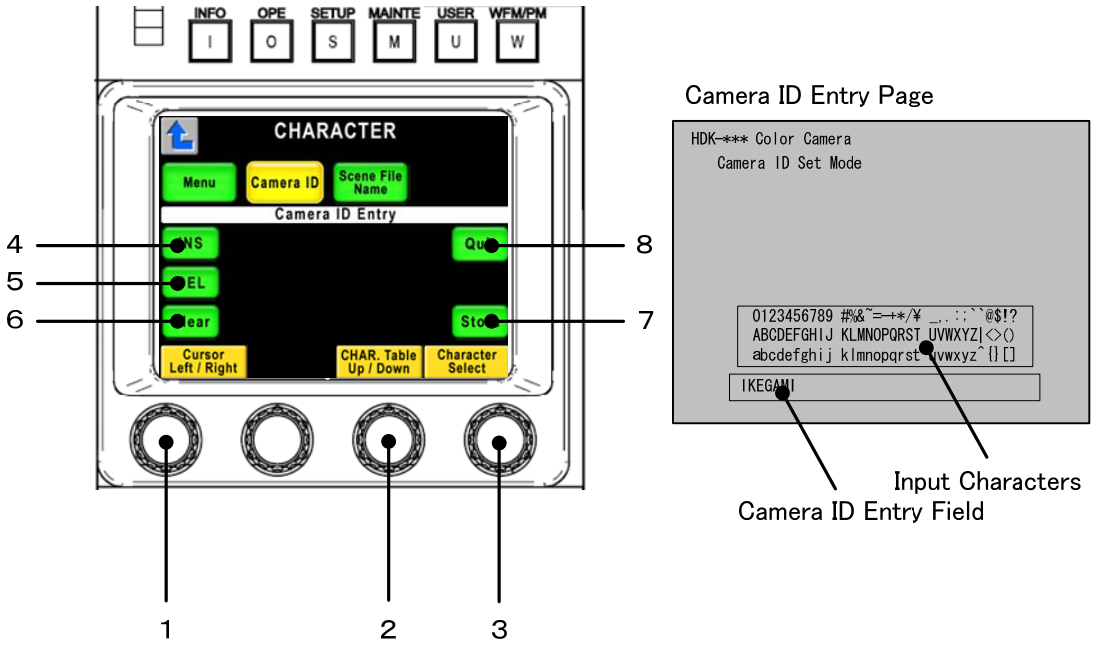
- Select Knob : Horizontal Position control for BARS TITLE.
- Next Knob : Vertical Position control for BARS TITLE.
- Enter Knob : Leaving from Position Setup Mode

5. Push Enter Switch to leave from Position Setup Mode.

## 14.3 Camera ID Entry

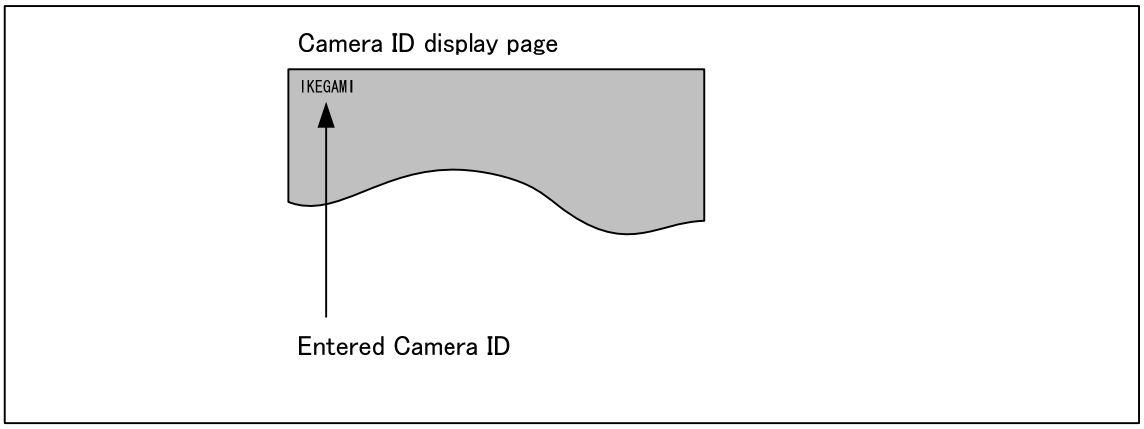
Camera ID can be entered.
Entered Camera ID can be displayed to PM(Picture Monitor). Entering Camera Name or Cameraman Name may help for VE(Video Engineer) to recognize easily what camera is shooting the picture on monitor.  Camera ID can be entered up to 48 letters of alphabet, numeral and typical symbols.

1. Select Camera ID from “CHARACTER” Page.
2 In watching PM screen, enter letters by Rotary Encoder Knob and LCD icon switches.




| | |
|---|---|
| 1. Cursor Left/Right Knob | : To move cursor right ad left to select a character. |
| 2. CHAR. Table Up/Down Knob | : To move cursor up and down to select a character. |
| 3. Character Select Knob | : To move cursor Camera ID Entry Field. |
| 4. INS Switch | : To insert one character between characters. |
| 5. DEL Switch | : To delete a character. |
| 6. Clear Switch | : To delete all input characters. |
| 7. Store Switch | : To enter Camera ID to memory in camera side. |
| 8. Quit Switch | : To quit entry page. |

3. After the input, push “Store” switch to save Camera ID to the memory.
4. When “PM IND/PAGE” switch is pressed, PM screen will change to Camera ID screen and entered Camera ID will be displayed accordingly.




For the reentry, repeat above procedure from 1 to 4.

***Note*** This function only available with Camera or BS/CCU which has Camera ID function.
At the multiple panel operation, if Camera ID and Scene File Name are set at the same time, those setting items may become confused.

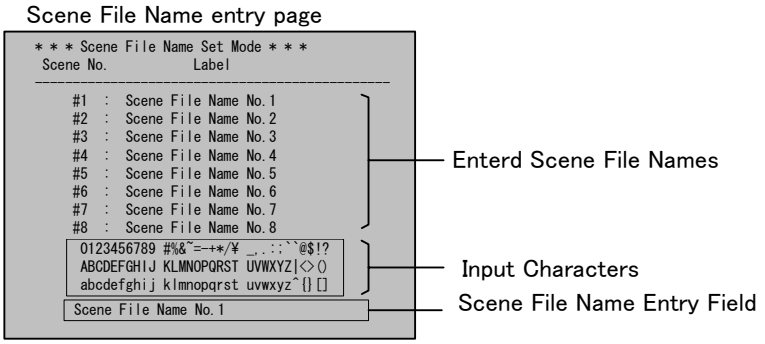
## 14.4 Scene File Name entry

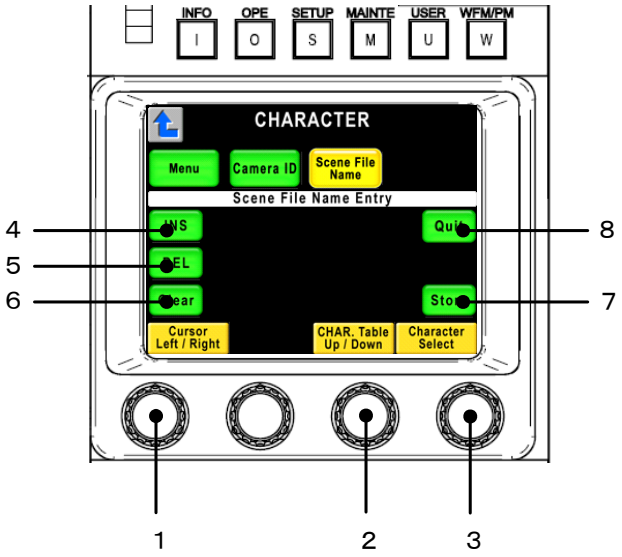
“Scene File Name” can be entered to each Scene File.
Entered Scene File Name can be displayed onto PM(Picture Monitor) all the time. Each it is easily to confirm what Scene File is used for each scene on the Monitor.
Scene File Name can be entered up to 31 letters with alphabet, numeral and typical symbols.

1. It is possible to make it to the scene file name registration screen automatically by making the scene file. Entering page can be set automatic coming up or not with “Panel Config.” setup.

***Reference*** Refer to “18. PANEL SETUP(PANEL CONFIG.)” for detail.

2. When Enter or change Scene File Name afterwards, select “Scene File Name” in “Character” page to entry.



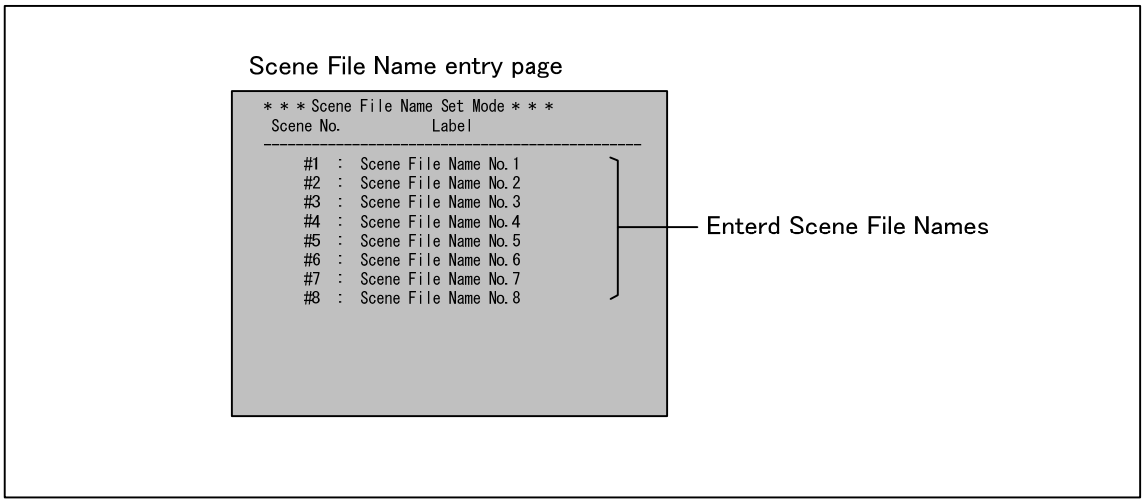




1. Cursor Left/Right Knob : To move cursor right ad left to select a character.
2. CHAR. Table Up/Down Knob : To move cursor up and down to select a character.
3. Character Select Knob : To move cursor Scene File Name Entry Field.
4. INS Switch : To insert one character between characters.
5. DEL Switch : To delete a character.
6. Clear Switch : To delete all input characters.
7. Store Switch : To enter Scene File Name to memory in camera side.
8. Quit Switch : To quit entry page.

3. After entering scene file, press Store switch to save Scene File Name. Entered Scene File Name will be registered.
4. Press Quit switch to finish registering.

***Note*** The automatic Scene File Name Entry screen reading function is set to turning on. The scene file did the preservation operation, and it has moved. In this case, it returns to former screen with the Quit switch.
It returns to the character screen with the Quit switch when moving from the CamID screen and the Menu screen.

5. Press PM IND/PAGE switch several time until Scene File Name page comes up. PM screen turns to Scene File Name Entry page and entered Scene File Name is displayed.

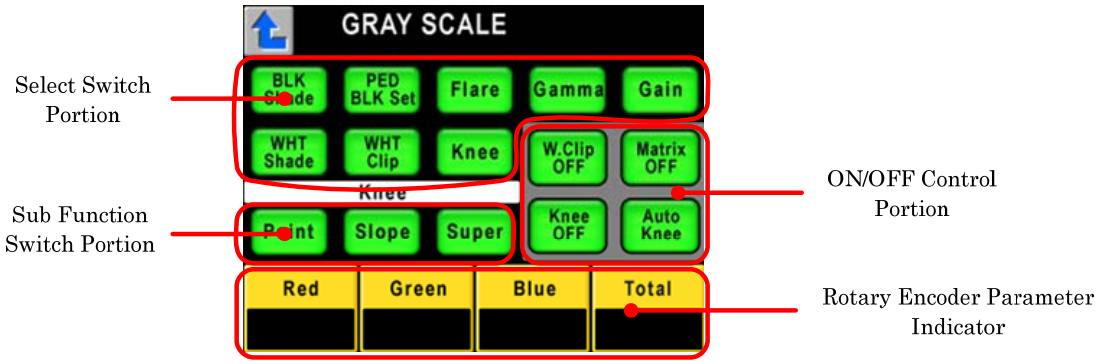



Repeat procedure No. 2 to No. 4 to modify Scene File Name.

***Note*** This function is only available with the camera and BS/CCU which supports Scene File Name Function.
At the Scene File Name entering process, Scene File is changed by another panel, entering menu will be cleared automatically.
At the multiple panel operation, if Camera ID and Scene File Name are set at the same time, those setting items may become confused.

# 15. USER SETTING

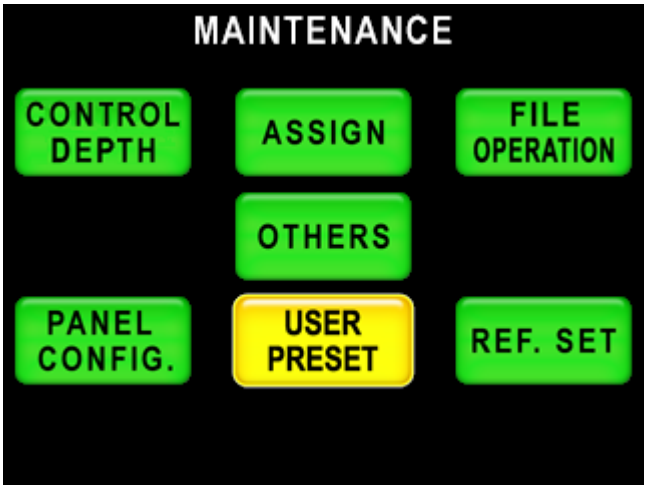
OCP-200 has a function to customize LCD menu.
3 pages of User Customized Page can be registered as same as basic control pages. SETUP items can be registered in User Customized page.



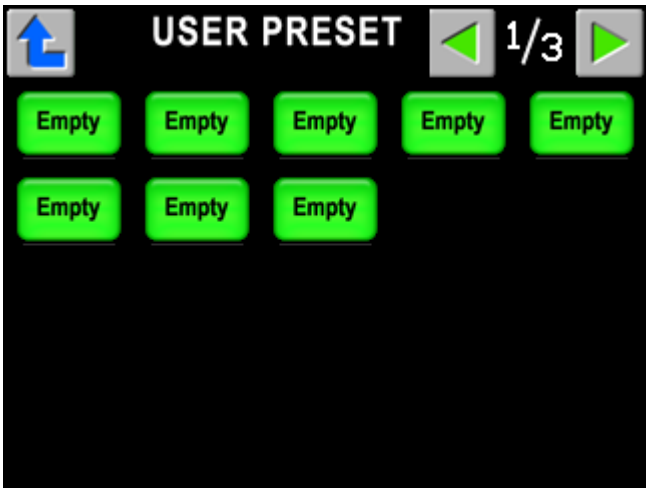

## 15.1 Registration of user page

Push the MAINTE Switch from the FUNCTION Switches in the upper part of the LCD.

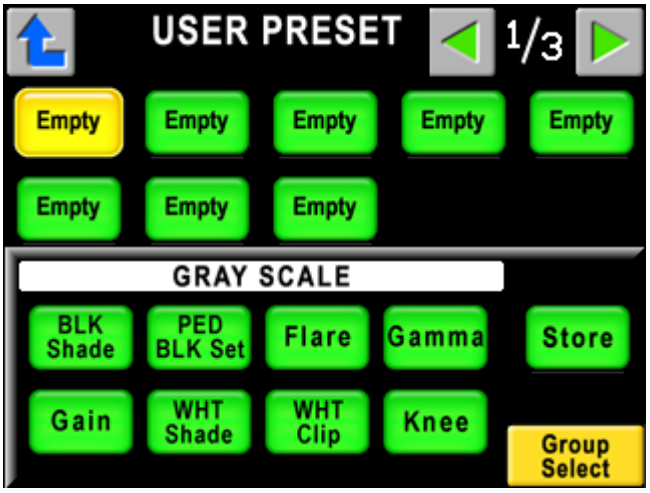

And press USER PRESET in LCD menu.



Selection functions can be assigned to 8 LCD switches. Unregistered switch indicates Empty as below picture. Registered switch indicates function name instead of Empty indication.

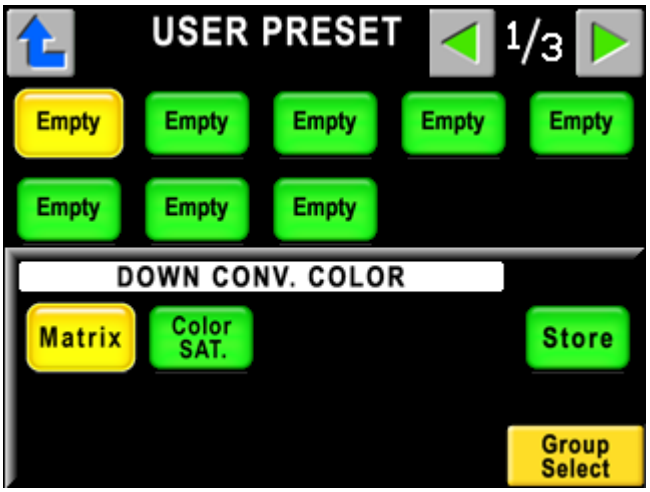



Press the switch to be registered or to be changes assignment.

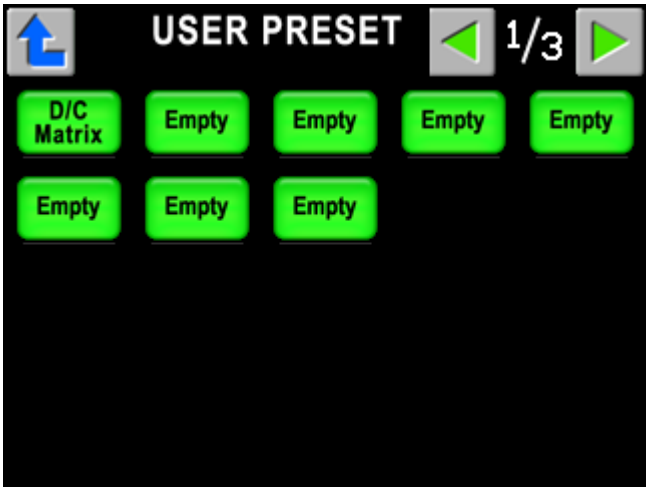



The switch blinks and Selection Function Switches are displayed in bottom side. By rotating rotary encoder on right side, function group can be changed. If it not necessary to assign the function to the switch, select Empty icon from Default Group and register it to the switch. If the switch is registered with Empty, the switch will not come up when User Page is recalled.

Select one switch to be assigned from function switch group and press Store Switch.




Assigned function name is displayed on the switch.




Repeat above procedure for the assignment to each switch. User Preset Pages consists 3 pages. Page selection can be done with ◀ ▶ switches on top right side. To quit the assignment page, press ↰ switch.

To avoid duplication, DOWN CONV. Control Item is indicated with “D/C” on selection switch for Registration/Readout page.

Assignable Function Table

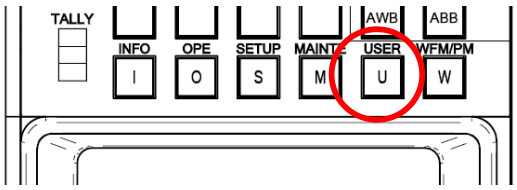
| Function Group Window | | Registration Page / Readout page |
|---|---|---|
| Group Name | Selection Switch Indication | Selection Switch Indication |
| GRAY SCALE | BLK Shade | BLK Shade |
| | PED BLK Set | PED BLK Set |
| | Flare | Flare |
| | Gamma | Gamma |
| | Gain | Gain |
| | WHT Shade | WHT Shade |
| | WHT Clip | WHT Clip |
| | Knee | Knee |
| DETAIL | DTL1 | DTL1 |
| | DTL2 | DTL2 |
| | Soft | Soft |
| | Skin | Skin |
| | Color | Color |
| | Hi-Light | Hi-Light |
| DOWN CONV. DETAIL | DTL1 | D/C DTL1 |
| | DTL2 | D/C DTL2 |
| | Soft | D/C Soft |
| | Skin | D/C Skin |
| | Color | D/C Color |
| COLOR | Matrix | Matrix |
| | Color SAT. | Color SAT. |
| | CSTM Color1 | CSTM Color1 |
| | CSTM Color2 | CSTM Color2 |
| | Color CORR. | Color CORR. |
| DOWN CONV. DETAIL | Matrix | D/C Matrix |
| | Color SAT. | D/C Color SAT |
| OTHERS | Auto Setup | Auto Setup |
| DEFAULT | Empty | Empty(No Indication) |

***Reference*** Function group configuration equals to SETUP pages. Refer to function list in "4.4 SETUP" for the detail of assignable functions to each switch.

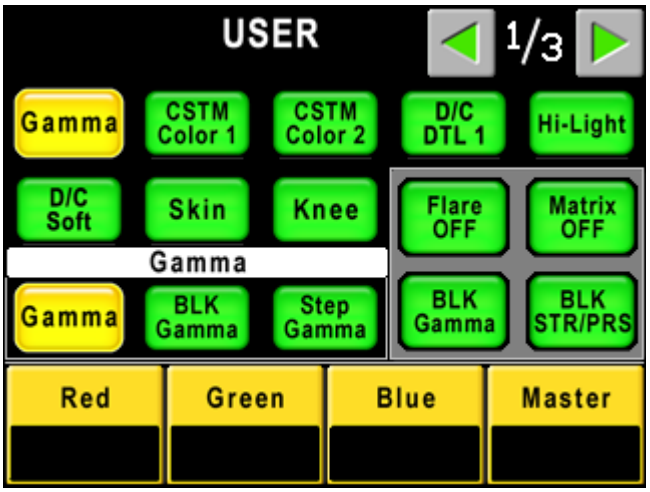
***Note*** The Auto Setup switch becomes the reading switch of the Auto Setup screen. It is possible to return by pushing the  switch from the Auto Setup screen.

## 15.2 Reading of user screen

Push the USER Switch from the FUNCTION Switches in the upper part of the LCD.

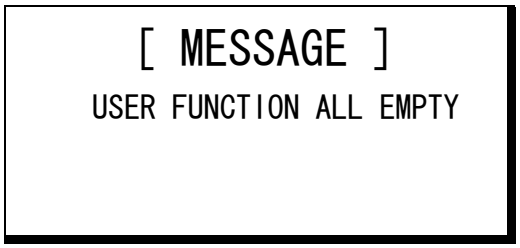



Registered User Pages are displayed on LCD screen.




User Registration page consists up to 3 pages and page change can be done with switches on top right side. But unregistered page will not be displayed and empty area among Registered Switches is filled with switch automatically, so that page no. at the registration and displayed page no. may be different.

If there is no registered page, following message will be displayed.




To quit the User page, press another Function switch on the top side of panel.

# 16. PARALLEL CONNECTION

Control Knob of OCP-200 is set to Relative Value Iris Control basically. However, Iris control can be set either Absolute Value Iris Control or Relative Value Iris Control for each application.

Previous Ikegami OCP has adopted Absolute Value Control, parallel OCP connection(parallel operation) was not available. But OCP-200 allows parallel Iris control by the setting with Relative Value Iris Control.

***Reference*** Refer to “18. PANEL SETUP(PANEL CONFIG.)” for detail.
Refer to “6. ABSOLUTE VALUE IRIS CONTROL”, “RELATIVE VALUE IRIS CONTROL” for detail operation.

Find below chart for Iris control availability by the setting.

| | | MCP | OCP-200/IRP-100/RM-51A | | Previous OCP |
|---|---|---|---|---|---|
| | | Relative | Relative | Absolute | Absolute |
| MCP | Relative | OK | OK | OK | OK |
| OCP-200 /IRP-100 /RM-51A | Relative | OK | OK | N/A | N/A |
| | Absolute | OK | N/A | N/A | N/A |
| Previous OCP | Absolute | OK | N/A | N/A | N/A |

OK: Parallel Connection(Parallel Iris Control) available
N/A: Parallel Connection(Parallel Iris Control) NOT available
In case of IRP-100/RM-51A, Not only Iris control but also all control knobs should be set Relative/Absolute control mode.

## 16.1 Limitation of connected number at network

Eight MCP/OCP can be connected with one BS/CCU in the maximum. MCP is counted with one regardless of the state of the camera selection. MCP is not related in the state of the camera selection, and counted with one. The number of OCP that can be connected with one BS/CCU at the same time becomes seven when there is one MCP in the network. The number of OCP that can be connected at the same time becomes six when there are two MCP.

## 16.2 Warning at network

Two or more OCP can be connected with BS/CCU at the network. OCP is connected with BS/CCU operated with other OCP. It is likely to become a trouble when operating it. Warning is put out to the LCD when other OCP is connecting with BS/CCU, and attention can be drawn. It is necessary to set Panel Config to do this. When the assign setting is changed etc., it is confirmed whether other OCP is connecting with BS/CCU. When other OCP is connected, the following are displayed on the LCD.

Please push OK after it confirms it.


Please push OK after it confirms it.

***CAUTION*** Even if warning is displayed, the connection can be done, and be operated. When the power supply start-up of CPH-200 that OCP connects and the system start up the power supply together, warning might not be displayed.

***Reference*** Refer to “18. PANEL SETUP(PANEL CONFIG.)” for detail.

# 17. 3D CAMERA CONTROL(OPTION)

Two cameras are composed as 3D camera. OCP-200 can individually control Lch/Rch for maintenance. And, the simultaneous control for the operation can be done.

***CAUTION*** Only when the network is operated, 3D camera control can be used.

## 17.1 Setting of 3D CONRTOL MODE

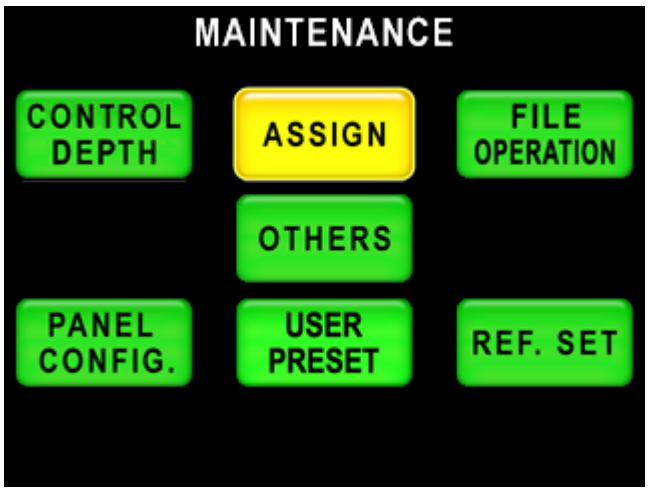
To control 3D camera, it sets it with Panel Config.

***Reference*** Refer to “17. PANEL SET-UP(PANEL CONFIG.)” for detail.

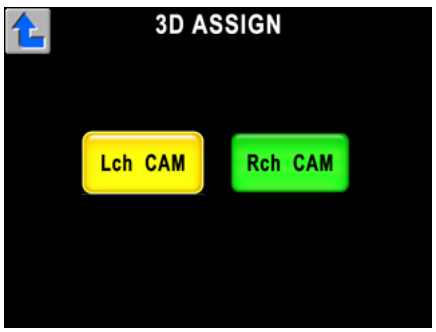
## 17.2 Assign initialization of Lch camera/Rch camera

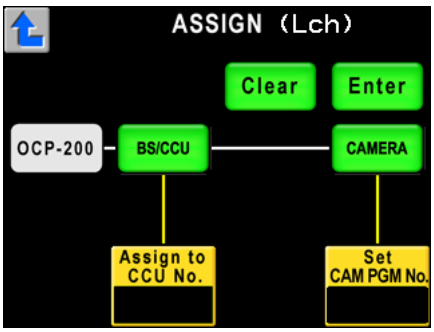
When 3D camera is controlled, it is necessary to select the camera for Lch and the camera for Rch from two or more networked cameras.

1. Push the MAINTE Switch from the FUNCTION Switches in the upper part of the LCD. And press ASSIGN Switch .




2. The assign which camera to allocate respectively is set to the camera for Lch and the camera for Rch.



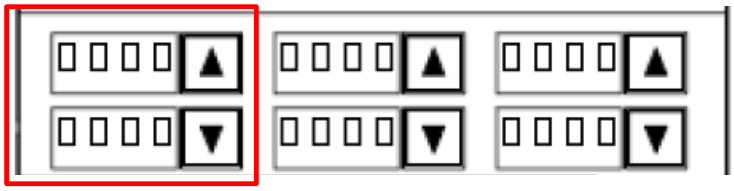



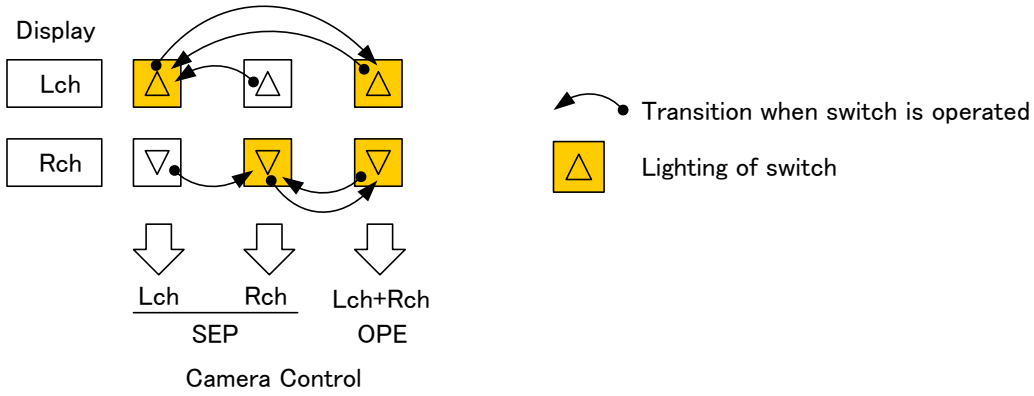

***Reference*** Refer to “11. SETTING OF PANEL ASSIGN ANDPROGRAM NUMER” for detail.

## 17.3 Control change of Lch/Rch/OPERATION

The individual control of Lch/Rch for maintenance is the SEPARATES MODE. The simultaneous control for the operation is the OPERATION MODE. It is possible to control by switching two modes. The composition of the Select Function Portion is changed at 3D OPERATION MODE. It functions as 3D camera selection switch a left selection switch.

Select Function Portion






Select Function Portion（3D）

| PAGE | LEFT | CENTER | RIGHT |
|---|---|---|---|
| 1 | 3D | ND | Gain |
| 2 | 3D | ND | CC |
| 3 | 3D | Gamma | Bkst |
| 4 | 3D | EFF | AWB |

## 17.4 About the function operation limitation at the OPERATION MODE

CONTROL DEPTH becomes “Standard” because of the prevention of the Miss operation rate at the OPERATION MODE. It returns to the mode set by CONTROL DEPTH when returning it to the SEPARATES MODE.
However, the setting is succeeded at the operation mode when set to “Basic”.

## 17.5 Status confirmation of Lch/Rch camera

The status (item that changes by ON/OFF and STEP) of the camera of Lch/Rch might differ when switching from 3D CONRTOL MODE and the SEPARATES MODE to the OPERATION MODE. It is likely to interfere to 3D operation by the item of the difference.
The difference of status can be confirmed to the Lch camera and the Rch camera. There are two methods of confirmations.

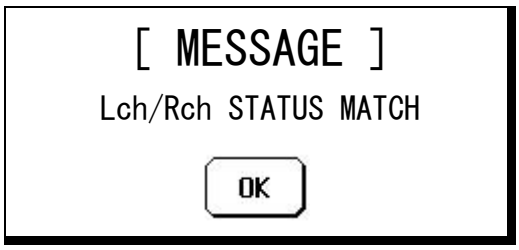
- **Status check by operation of the Select Function Portion**
  The check item becomes the following.

Status check item list

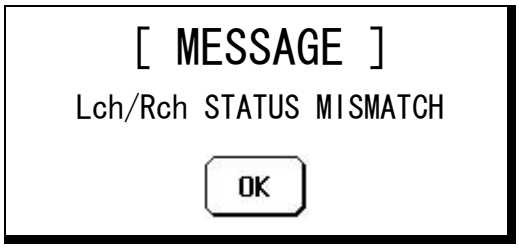
| | |
|---|---|
| CAP ON/OFF | KNEE ON/OFF |
| DIASDCOPE ON/OFF | AUTO KNEE ON/OFF |
| FILTER REMOTE ON/OFF | SMOOTH KNEE SELECT |
| ND FILTER SELECT | SUPER KNEE SELECT |
| CC FILTER SELECT | DTL ON/OFF |
| ECC FILTER SELECT | SOFT DTL ON/OFF |
| BARS ON/OFF | SKIN DTL ON/OFF |
| TEST PULSE ON/OFF | SLIM DTL ON/OFF |
| AWB REMOTE ON/OFF | DIAGONAL DTL ON/OFF |
| AWB Ach | ZOOM TRACK DTL ON/OFF |
| AWB ON/OFF | ZOOM SKIN DTL ON/OFF |
| SCENE FILE SELECT | COLOR DTL ON/OFF |
| SHUTTER SELECT | HI-LIGHT DTL ON/OFF |
| VARIABLE SUHTTER ON/OFF | COLOR SATURATION ON/OFF |
| SUPER V SELECT | CHROMA ON/OFF |
| BLACK SHADE ON/OFF | COLOR CORRECTOR ON/OFF |
| WHITE SHADE ON/OFF | C.TEMP 5600K ON/OFF |
| GAIN SELECT | CUSTOM COLOR 1 ON/OFF |
| FLARE ON/OFF | CUSTOM COLOR 2 ON/OFF |
| GAMMA SELECT | BLACK STRETCH/PRESS SELECT |
| BLACK GAMMA SELECT | ZOOM REMOTE ON/OFF |
| WHITE CILP ON/OFF | FOCUS REMOTE ON/OFF |
| MATRIX ON/OFF | |
| MARTIX SELECT | |

In the operation mode, the difference of the status of two cameras can be confirmed by pushing the left switchs ▲ ▼ that lights the Select Function Portion at the same time.

The following are displayed on the LCD when there is no difference.



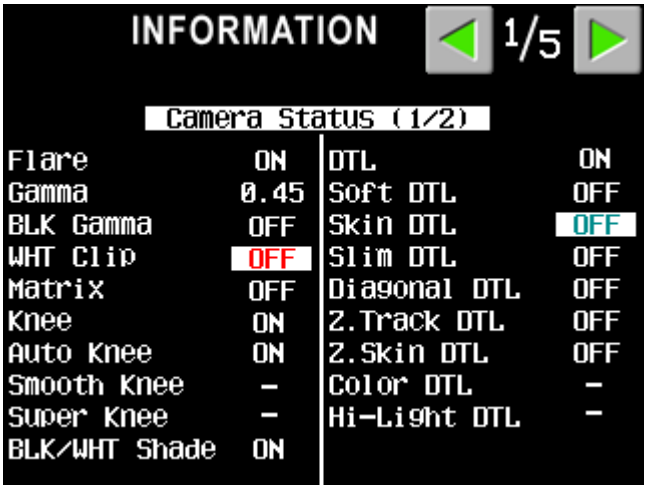

And, the following are displayed on the LCD when there is difference.




In the SEPARATES MODE, please change each camera set so that status may become the same.

- **Status check by information screen**

  The Camera Status screen on the information screen is displayed at the operation mode.
  The difference of the status of the Lch/Rch camera is displayed by the display color.
  It is displayed as follows when there is a difference.
  Background [White] and character color [Dark Cyan].
  The displayed status becomes the one of the Lch camera




  It becomes it as follows when there is no difference.
  Ikegami standard setting : Background [Black] and character color [White].
  Not Ikegami standard setting : Background [White] and character color [Red].

***Note*** It is efficient measures to make “Clear to Standard” function work compared with each Lch/Rch camera though take the difference.

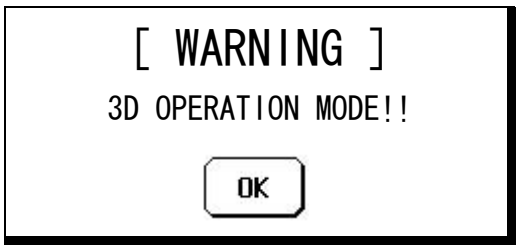
***CAUTION*** The acknowledgement function of status is not the one guaranteeing to all items. The comparison might not be able to be confirmed to the function etc. added by the new features included and the user specification.

***Reference*** Refer to "10. INFORMATION" for the item when status by the information screen is checked and the manner of operation.

## 17.6 Behavior at OPERATION MODE

As for the OPERATION MODE in 3D CONRTOL MODE, a usual operation and part of operation are different.

- The CONTROL DEPTH setting becomes “Standard".
- Various displays of the panel are the data of the Lch camera.
- It is not possible to shift to the (3/5-5/5) pages of Information screens.
- Blinking the ALARM indicator (switch) becomes OR operation of alarm information on both cameras. However, it is not possible to move to the Diagnostic Information screen by pushing the switch when blinking.
  When the ALARM indicator (switch) blinks, and the switch is pushed, the following are displayed on the LCD.



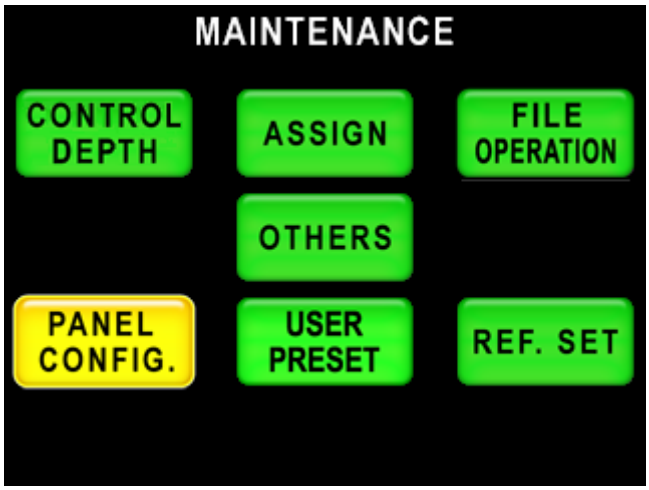
# 18. PANEL SETUP(PANEL CONFIG.)

OCP-200 has many functions, however, Control Logic and setup item can be changed in accordance with each system application and control manner.

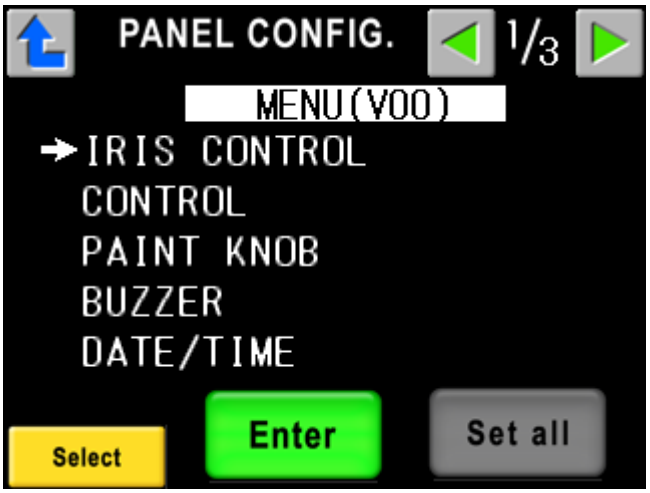
## 18.1 Operating Procedure

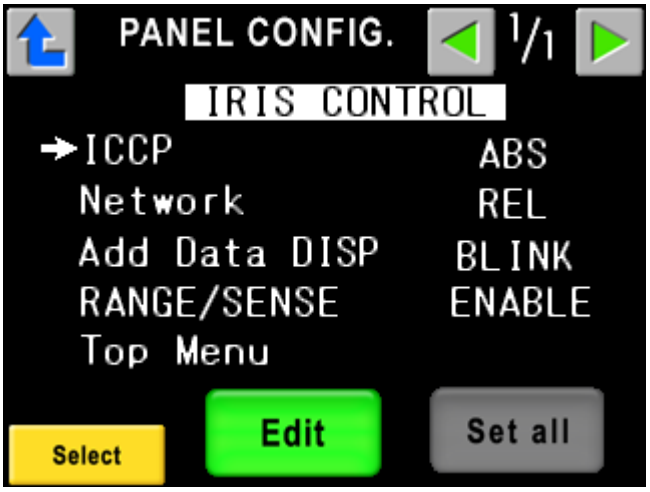
1. Push the MAINTE Switch from the FUNCTION Switches in the upper part of the LCD.


2. Press “PANEL CONFIG.” in LCD screen. Panel Set-up menu will come-up.

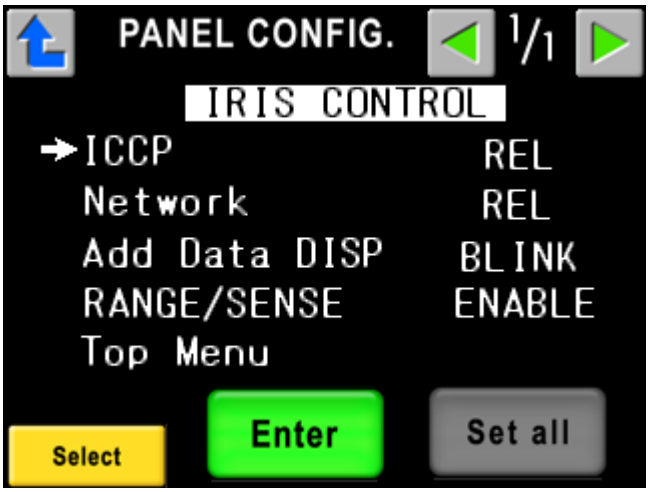



3. By rotating Rotary Encoder on left side, “→” symbol moves up and down. Set control item and push “Enter”. Menu page can be changed with ◀ ▶ switch.

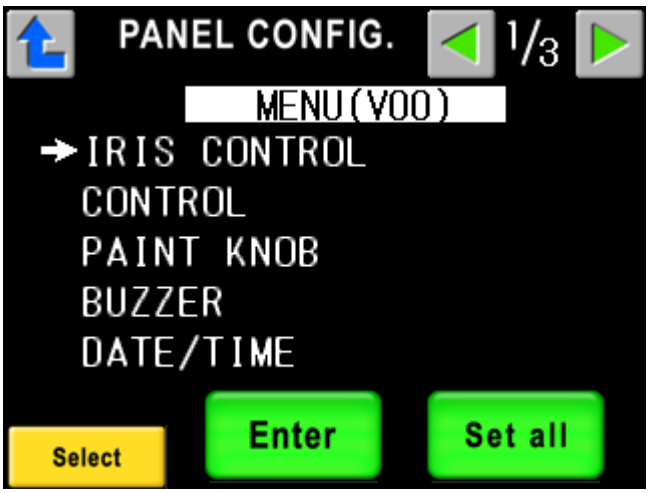




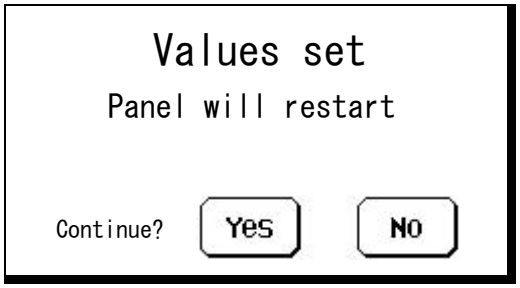

4. By rotating Rotary Encoder on left side, "→" symbol moves up and down. Set control item and push "Edit". "Edit" changes to "Enter" and control item will blink.




5 Selecting control item by Rotary Encoder, and press "Enter" switch. The entered setting is not final entry but it still temporary at this stage. If one of setting is changed, "Set all" will blink to indicate the change.



6 Change all of needed menu summary and set-up item, and press “Set all” switch.

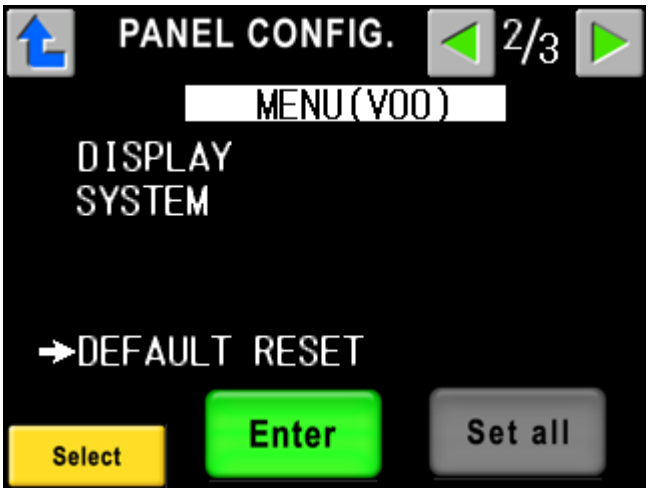



7. Pop-up window comes up on LCD screen for attention. Press “Yes” to confirm the setting from temporary entered setting. To initialize the setting, Control Panel will restart automatically. If “No” is pressed, the setting will be returned to previous setting.

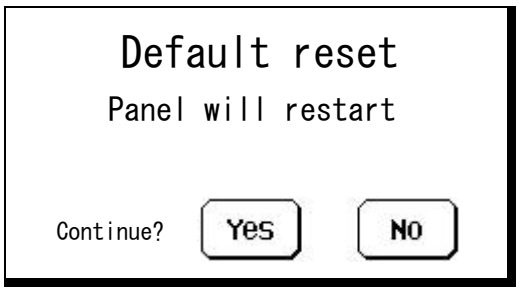
***CAUTION*** If it returns from Panel Config. page without pressing “Set all” switch, temporary set-up data is cleared and it returns to previous set-up. However, only DATE/TIME menu set-up is changed by pressing “Edit” switch, not by pressing “Set all”, because of its characteristics.

## 18.2 Initialize of Panel Config.

Setting item of Panel Config. can be initialized as following.
Select “DEFAULT RESET” and press “Enter”




The pop up window is displayed on the LCD, and attention is drawn.




Popup window comes up for the attention. Push “Yes” to reset to default setting and restart the panel. Press “No” to go back to previous setting.

***CAUTION*** “DATE/TIME” or system related item is not included in initial setup item.

***Reference*** Refer to “18.3 Setup Item” to confirm initialize item.
Refer to “20.3 Initial Factory Setting” for setting procedure.

## 18.3 Setup Item

Setup Item Table (1/5)

| Menu | Item | Setting | Description |
|---|---|---|---|
| ***IRIS CONTROL*** | | | ***Iris Control Setup***<br>To setup Iris Control Item<br>Refer to "6. ABSOLUTE VALUE IRIS CONTROL", "7. RELATIVE VALUE IRIS CONTROL" for detail. |
| | ICCP | | Iris Control Setup at traditional Ikegami command control mode |
| | | ABS *1 | Absolute Value Iris Control |
| | | REL | Relative Value Iris Control |
| | Network | | Iris Control Setup at Network command control mode |
| | | REL *1 | Absolute Value Iris Control |
| | | ABS | Relative Value Iris Control |
| | Add Data DISP | | Indication when OCP Iris position and Lens Iris position is different.<br>Requires Camera Head adoption. |
| | | BLINK *1 | RELATIVE switch blinking |
| | | OFF | No indication |
| | RANGE/SENSE | | Enable/Disable setting of RANGE/SENSE Knob |
| | | ENABLE *1 | Enabled(Active)。 |
| | | DISABLE | Disabled(Not working) |
| | IRIS SW | | The switch related to the iris is set. |
| | | STD *1 | Standard |
| | | GUARD | The switch guards.<br>Please push for 2 or 3 seconds to make it work. |
| ***CONTROL*** | | | ***Other Control Setup*** |
| | Tally Guard | | Tally Guard ON/OFF setting<br>To inhibit switch operation at ON-AIR Tally is ON.<br>Refer to "18.4 ON-AIR TALLY GUARD" for detail setup item. |
| | | OFF *1 | Disabled |
| | | LIMITED | Active for limited items |
| | | ALL | Active for all items |
| | AWB/ABB Start | | Setup of AWB/ABB trigger |
| | | STD *1 | Push to start |
| | | GUARD | Guard active for switch<br>Press a couple of seconds to start |
| | | NOT AT | When the switch is pushed, AWB/ABB is executed.<br>Quick Auto Setup/Auto Black Shade cannot be executed. |
| | CAL200% SW | | The switch guard of CAL200% is set. |
| | | STD *1 | No guard |
| | | GUARD | The switch guards.<br>Please push CAL switch long to turn on CAL200%. |

*1 marked Item is initialized by "18.2 Initialize of Panel Config." and "20.3 Initial Factory setting".
*2 marked Item is initialized by "20.3 Initial Factory Setting"
*3 marked Item cannot be initialized. In abnormality, it is automatically initialized.

Setup Item Table (2/5)

| Menu | Item | Setting | Description |
|---|---|---|---|
| ***CONTROL*** | | | ***Other Control Setup*** |
| | SF Name Entry | | At the Scene File Name Entry, to set automatic recall Scene File Name Input Page.<br>Refer to "14.4 Scene File Name Entry" for the detail. |
| | | OFF *1 | Not recall Scene File Name Input Page |
| | | ON | Recall Scene File Name Input Page automatically at the Scene File Name Entry. |
| | Basic Setting | | The range of the operation when CONTROL DEPTH SETTING function is "BASIC" is set. |
| | | STD *1 | Standard |
| | | LIMIT | It is assumed only minimum items of IRIS and MPED, etc. |
| | 3D Mod | | Setting of 3D control mode |
| | | OFF *1 | 3D control cannot be done. |
| | | ON | 3D control can be done. |
| ***PAINT KNOB*** | | | ***Paint Knob Setup*** |
| | Gain Range | | To set control range of Gain knobs |
| | | 3dB *1 | +/−3dB Range Control |
| | | 6dB | +/−6dB Range Control(to expand the range) |
| | PED Range | | To set control range of Pedestal knobs |
| | | STD *1 | Standard |
| | | FINE | Fine(for fine tuning) |
| | | S FINE | Super Fine(for super fine tuning) |
| | Black Knob | | To assign Black control to one knob |
| | | SELECT *1 | Setting of Pedestal and Flare can be changed by switch on the panel.<br>Refer to "2.4 Control Knob Potion" for switching on panel. |
| | | PED | Fix to Pedestal |
| | | FLARE | Fix to Flare |
| | Center Flare | | To set Center Flare Knob<br>It is activated when Black Knob setting is FLARE mode or SELECT mode, and also panel switch is set to FLARE. |
| | | AUTO *1 | To set Master Flare control if camera head has Master Flare function. If not, it is set to G−ch Flare control. |
| | | G CH | Fix to G−ch Flare control |
| | | MASTER | Fix to Master Flare control |
| | M PED Range | | To set control range of Master Pedestal knobs |
| | | STD *1 | Standard |
| | | FINE | Fine(for fine tuning) |
| | | S FINE | Super Fine(for super fine tuning) |

*1 marked Item is initialized by "18.2 Initialize of Panel Config." and "20.3 Initial Factory setting".

*2 marked Item is initialized by "20.3 Initial Factory Setting"

*3 marked Item cannot be initialized. In abnormality, it is automatically initialized.

Setup Item Table (3/5)

| Menu | Item | Setting | Description |
|---|---|---|---|
| *BUZZER* | | | *Buzzer Volume Setup* |
| | Click Volume | | Volume setting for click sound of hard switch and touch screen |
| | | STD *1 | Set to standard volume level |
| | | ATT | Reduce to half of volume level |
| | | OFF | Set to volume off |
| | Error Volume | | Volume setting for error sound of hard switch and touch screen |
| | | STD *1 | Set to standard volume level |
| | | ATT | Reduce to half of volume level |
| | | OFF | Set to volume off |
| | Call Volume | | Volume setting Call sound from camera head |
| | | STD *1 | Set to standard volume level |
| | | ATT | Reduce to half of volume level |
| | | OFF | Set to volume off |
| *DATE/TIME* | | | *Date and Time Setup*<br>Second is reset to zero at the setup. Set year through minute at the setup. |
| | Year | *3 | Year |
| | Month | *3 | Month |
| | Date | *3 | Day |
| | Hour | *3 | Hour |
| | Minute | *3 | Minute |
| *DISPLAY* | | | *Display Setup* |
| | OFS Data DISP | | To set offset display of control date<br>Refer to "8.2 Display of Control Data Offset" |
| | | SELECT *1 | ON/OFF setting can be done by LCD menu. |
| | | OFF | Not offset data displayed |
| | | ON | Offset data displayed |
| | M PED Value | | To set MASTER PED Indicator |
| | | % data *1 | Video level indication<br>To display M.PED value, camera should adopt M.PED control function. If not, control date is displayed regardless the setting. |
| | | CONTROL | Control data is displayed. |
| | Call Latch | | To set Camera No. indicator blinking 20 sec. after pushing Call button on camera side. |
| | | ON *1 | Activates to blink |
| | | OFF | No blinking |
| | Program No. | | To set display mode of Program Camera Number.<br>Refer to "11.4 Display mode of Program Camera Number". |
| | | CAM *1 | CAM mode(CAMERA has a priority) |
| | | SELF | SELF mode(OCP has a priority) |
| | | FIX | FIX mode(OCP fixation) |

*1 marked Item is initialized by "18.2 Initialize of Panel Config." and "20.3 Initial Factory setting".

*2 marked Item is initialized by "20.3 Initial Factory Setting"

*3 marked Item cannot be initialized. In abnormality, it is automatically initialized.

Setup Item Table (4/5)

| Menu | Item | Setting | Description |
|---|---|---|---|
| ***DISPLAY*** | | | ***Display Setup*** |
| | Connect WARN | | It is a warning screen of the assign change etc. When other OCP is connecting with connected BS/CCU, it is displayed. |
| | | OFF *1 | Doesn't display |
| | | ON | display |
| | DISP LIMIT | | The display limitation of the control data is set. |
| | | ON *1 | The display is limited by ±100. |
| | | OFF | The display is not limited. |
| | C.Temp | | To set display status of C.TEMP 5600K. |
| | | OFF *1 | Doesn't display |
| | | ON | display |
| ***SYSTEM*** | | | ***System Setup*** |
| | PAU | | To set for PANEL ASSIGNMENT UNIT(PAU) connection |
| | | OFF *1 | Default setting for no PAU connection |
| | | ON | To set ON for PAU connection<br>Attention for the setting. If it is set OFF, panel enable may not work properly at the panel assignment. |
| | PV CMD Send | | Setting of command transmission when PREVIEW switch is operated. |
| | | ON *1 | Enable |
| | | OFF | Disable |
| ***STD FUNCTION*** | | | ***Standard Setup***<br>A standard state when "Clear to Standard" is executed and the standard of the Camera Status screen are set. |
| | Matrix | | Matrix SETTING |
| | | OFF *1 | A standard setting is turned off. |
| | | ON | A standard setting is turned on. |
| | Matrix Select | | Matrix Select SETTING |
| | | 1 *1 | A standard setting is SEL 1. |
| | | 2 | A standard setting is SEL 2. |
| | | 3 | A standard setting is SEL 3. |
| | Auto KNEE | | Auto KNEE SETTING |
| | | ON *1 | A standard setting is turned on. |
| | | OFF | A standard setting is turned off. |
| | Auto IRIS | | Auto IRIS SETTING |
| | | ON *1 | A standard setting is turned on. |
| | | OFF | A standard setting is turned off. |
| | SDTV ASPECT | | SDTV ASPECT SETTING |
| | | 4:3 *1 | A standard setting is 4:3. |
| | | 16:9 | A standard setting is 16:9. |

*1 marked Item is initialized by "18.2 Initialize of Panel Config." and "20.3 Initial Factory setting".

*2 marked Item is initialized by "20.3 Initial Factory Setting"

*3 marked Item cannot be initialized. In abnormality, it is automatically initialized.

Setup Item Table (5/5)

| Menu | Item | Setting | Description |
|---|---|---|---|
| ***EXTERNAL I/O*** | | | ***External I/O Setup*** |
| | EXT2 5pin SEL | | Output setting of 5pin at EXT2 connector. |
| | | G TALLY *1 | G TALLY Output |
| | | EXT | EXTENDER Output |
| | | ALARM | ALARM Output |
| | EXT2 6pin SEL | | Output setting of 6pin at EXT2 connector |
| | | Y TALLY *1 | Y TALLY Output |
| | | EXT | EXTENDER Output |
| | | ALARM | ALARM Output |

*1 marked Item is initialized by “18.2 Initialize of Panel Config.” and “20.3 Initial Factory setting”.

## 18.4 ON-AIR TALLY GUARD

Can be inhibited switch control when ON-AIR Tally is lighting.

＜ON-AIR Tally Guard Function List＞

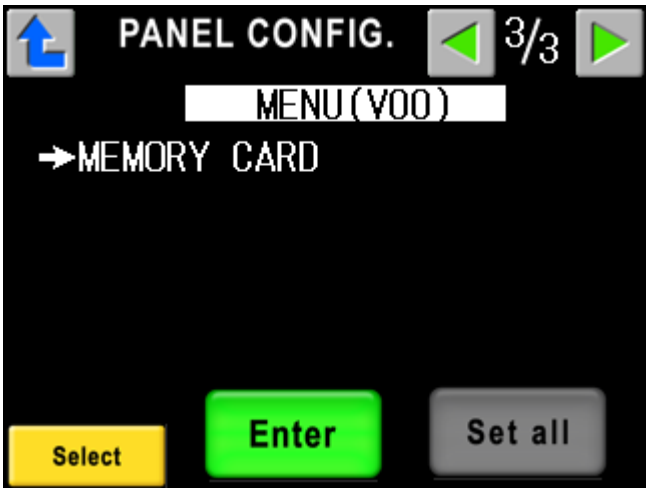
| Control Item | Panel Config. Setup | | |
|---|---|---|---|
| | OFF | limited | ALL |
| CAM PWR | — | ○ | ○ |
| VF POWER | — | ○ | ○ |
| PM ID/PAGE | — | — | — |
| PANEL ENABLE | — | ○ | ○ |
| CAP ON/OFF | — | ○ | ○ |
| BARS ON/OFF | — | ○ | ○ |
| CAL ON/OFF | — | ○ | ○ |
| AWB | — | ○ | ○ |
| ABB | — | ○ | ○ |
| NEXT SW | — | — | — |
| ND SELECT | — | — | ○ |
| CC SELECT | — | — | ○ |
| EFECT SELECT | — | — | ○ |
| GAIN SELECT | — | — | ○ |
| GAMMA SELECT | — | — | ○ |
| BLK STR/PRS SELECT | — | — | ○ |
| AWB MEMORY SELECT | — | — | ○ |
| SCENE FILE | — | — | ○ |
| FLARE CONT ON/OFF | — | — | — |
| PAINT LOCK ON/OFF | — | — | — |
| IRIS FULL ON/OFF | — | — | ○ |
| IRIS RELATIVE ON/OFF | — | — | ○ |
| AUTO IRIS ON/OFF | — | — | — |
| PREVIEW SW | — | — | — |
| CALL | — | — | — |
| KNOB FREE | — | — | — |
| KNOB FREE + STANDARD | — | — | ○ |
| INFO | — | — | — |
| OPE SW | — | — | — |
| LCD SW | — | — | ○ |
| SETUP SW | — | — | — |
| Gain Wobble ON/OFF | ○ | ○ | ○ |
| Zebra IND.ON/OFF | ○ | ○ | ○ |
| LCD SW | — | — | ○ |
| MAINTE SW | — | — | — |
| Head Bars ON/OFF | ○ | ○ | ○ |
| LCD SW | — | — | ○ |
| USER SW | — | — | — |
| LCD SW | — | — | ○ |
| WFM/PM SELECT | — | — | — |
| STANDARD SW | — | ○ | ○ |
| LCD SW | — | ○ | ○ |

—: Tally Guard Disable

○: Tally Guard Enable

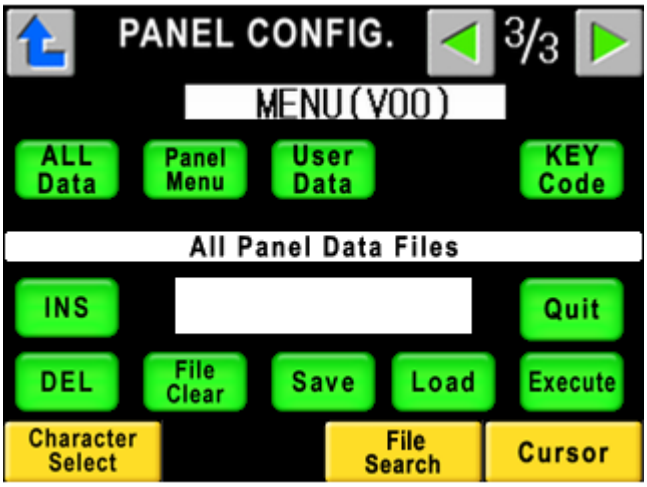
## 18.5 Saving and Loading of Panel data

The panel data is preserved on the SD memory card, and it is possible to read it if necessary. The data made with not only preservation as the backup data but also a certain OCP can be copied onto other OCP. Moreover, it comes to be able to have data different in each program and each video engineer easily.
Please select MEMORY CARD from the menu to save, and to read it, and push Enter.




In saving and reading the panel data, three methods can be selected.

- **ALL Data**
  Panel Config and data of user screen setting.
- **Panel Menu**
  Data of Panel Config.
- **User Data**
  Data of user screen setting.




The procedure of saving and reading to the SD memory card is the same as saving and reading the camera data. Warning etc. when it tried to read the erroneous data are similarly displayed.

Individual data can be read from the data saved with ALL Data as well as the camera data. For example, only the data of the user screen setting can be called from the data preserved with ALL Data.
When data is read, it is confirmed whether the current version and the preserved version are corresponding. The data of the differing version can be read. However, the part where the function by the difference of the version is different is not changed. When you read data with a different version, please confirm Panel Config and the user screen setting.

As for reading data from the SD memory card, because volume of data is a little, is instantaneously done. After reading, the panel is reset.

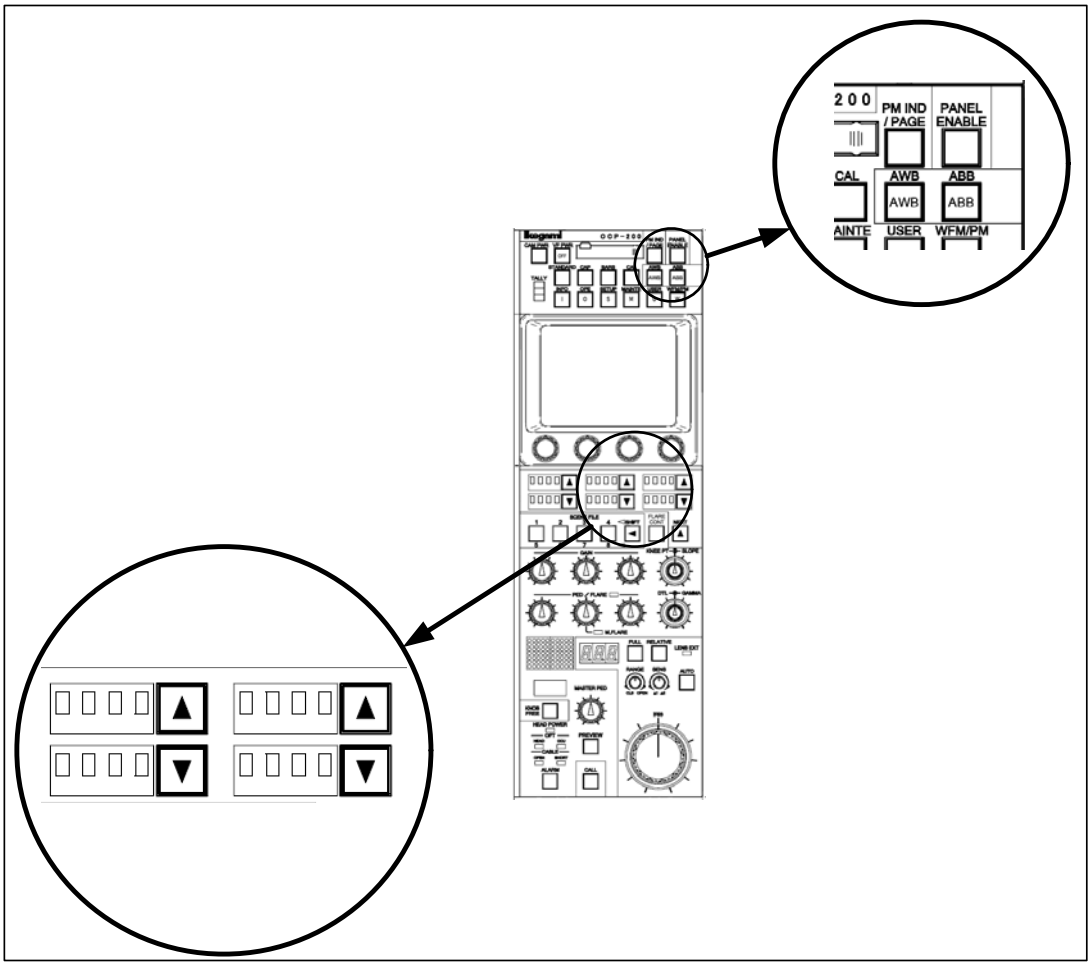
***Reference*** Refer to “9. MEMORY CARD OPERATION” for the detail

***Note*** When the KEY Code file for an optional setting and the customer's specifications setting is read, the [KEY Code] switch is used. Please refer to the manual attached to the KEY Code file for detailed use.

# 19. FIRMWARE UPDATING

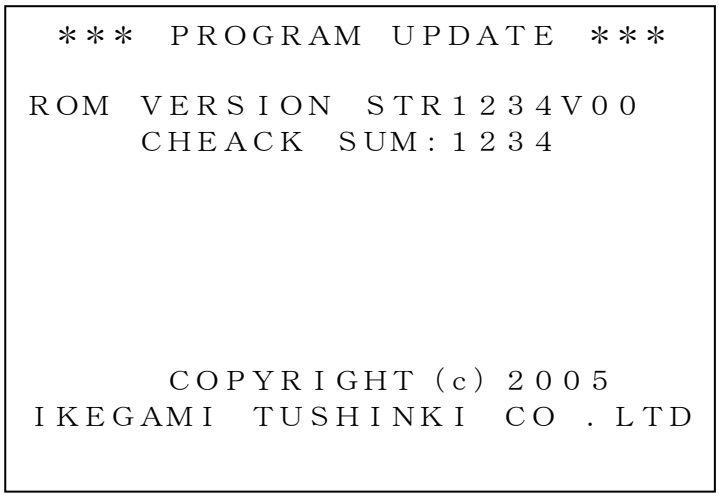
The firmware of OCP-200 can be updated by using an SD memory card.

## 19.1 Update Procedure of OCP-200

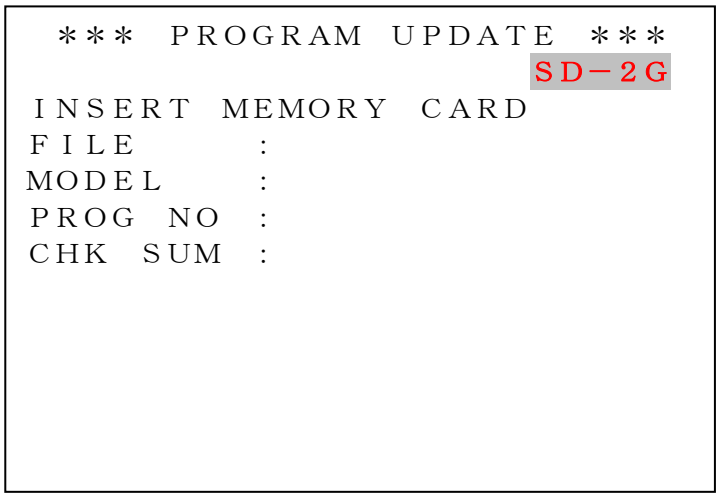


**1) Step 1**

Press and hold PANEL ENABLE switch for about 10 seconds.
Firmware update program as shown below is launched.




After several seconds, the screen below appears.




***Note*** When “SD-2G" is displayed at LCD, the upper bound capacity is 2G byte. In the one not displayed, the upper bound capacity is 1G byte.

**2) Step 2**

Change Step 2 order to:
Insert the SD memory card that the firmware (update file) is stored to the slot.

```
  ***  PROGRAM  UPDATE  ***

MENU  SEL:FILE  SELECT
FILE      :TEST_FILE.RDF
MODEL     :OCP-200
PROG  NO  :JPN_SAMPLE
CHK  SUM  :----

   SELECT:▲▼  EXECUTE:▼
```

When PANEL ENABLE switch is pressed and held for about 10 seconds with an SD card inserted from the normal screen, this screen also appears.

**3) Step 3**

Select an update file by UP/DOWN switches on the lower center of the LCD screen.
Confirm the selected update file by DOWN switch on the lower right of the LCD screen.

```
  ***  PROGRAM  UPDATE  ***

MENU  SEL:FILE  SELECT
FILE      :TEST_FILE.RDF
MODEL     :OCP-200
PROG  NO  :JPN_SAMPLE
CHK  SUM  :----

   SELECT:▲▼  EXECUTE:▼
    PROGRAM  UPDATE?
```

### 4) Step 4

Select whether to update or cancel by UP/DOWN switches on the lower center of the LCD screen.
Execute the selection (update or cancel) by DOWN switch on the lower right of the LCD screen.
When cancelled, go back to the step 3.

### 5) Step 5

When update is executed, data is transferred from the SD card to built-in buffer. The screen below appears while transferring the data, and transfer state can be checked by the bar graph on the lower side of the LCD.

```
  *** PROGRAM UPDATE ***

MENU SEL:FILE SELECT
FILE      :TEST_FILE.RDF
MODEL     :OCP-200
PROG NO   :JPN_SAMPLE
CHK SUM   :----

-------- CAUTION --------
DATA LOADING
******-----+----------|
```

After the data transfer is completed, the program is automatically updated.
At this time, the check sum for comparison with data after update is displayed.

```
  *** PROGRAM UPDATE ***

MENU SEL:FILE SELECT
FILE      :TEST_FILE.RDF
MODEL     :OCP-200
PROG NO   :JPN_SAMPLE
CHK SUM   :1B3C

-------- CAUTION --------
PROGRAMING
******-----+----------|
```

**6) Step 6**

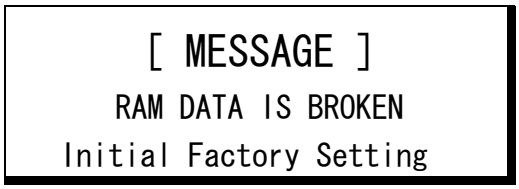
After the program update is completed, the check sum is compared to automatically determine whether the data is written properly.

```
  ＊＊＊ PROGRAM UPDATE ＊＊＊

MENU SEL:FILE SELECT
FILE      :TEST_FILE.RDF
MODEL     :OCP-200
PROG NO   :JPN_SAMPLE
CHK SUM   :1B3C

                    CHECK:▼
CHK SUM   :1B3C
    COMPLETE UPDATE OK
```

When the data is written properly, OK is displayed.

Quit the update program by PANEL ENABLE switch, and start execution of the updated firmware.

Following warning message may be indicated at the firmware updating because RAM partition has been changed from previous version.




If this warning message is displayed. It requires setup with“20.3 Initial Factory Setting”.

## 19.2 Update Procedure of Connected equipment

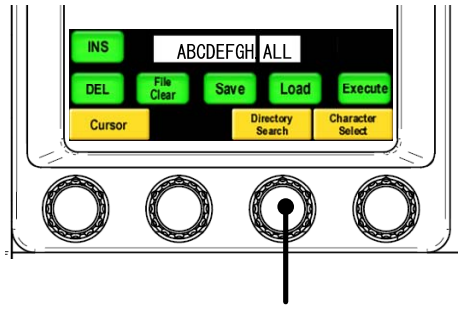
Firmware updating for other connected equipment can be done with OCP-200, although the objective equipment should have remote updating function with command connection.
And menu setting and/or switch setting of objective equipment are required.

***Reference*** Refer to operation manual of each equipment for detail setting.

The setting procedure of OCP-200 is only described in this chapter as following.

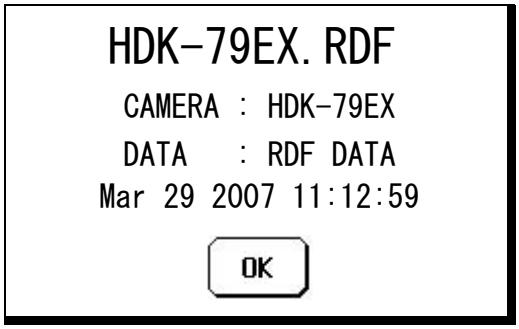
1. Insert SD memory card which is installed new firmware for objective equipment into the slot.
2. Push MAINTE switch on the top side of panel. Push FILE OPERATION switch in selection switches and push MEM.CARD SAVE/LOAD switch later.


3. Push RDF File switch.
4. Turn [Load] switch to “ON”.
5. Rotate File Search Control Knob to select target file.



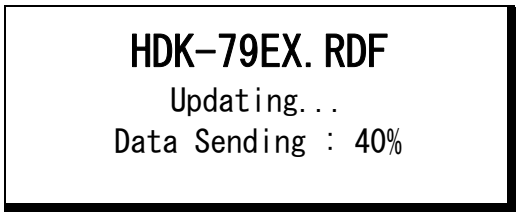

File Search Control

***Note*** RDF File search is done with RDF file extension only (Default setting).
If File Data Name on LCD screen is pushed, file data information will be displayed. Camera Model Name and File type can be confirmed. And by rotating File Search Control Knob at this condition, the other file data in the SD will be displayed sequentially.




6. Press “Execute” switch.


7 The Execute switch lights when “Yes” is pushed, the file name and the execution display are done on the LCD, and the update is executed. When “No” is pushed, it cancels




At the completing update, Complete Message window comes up and buzzer beep. Message window and buzzer will stop 1.5 sec. later.


Confirm completion of firmware updating with VF, PM or Indicators of objective equipment. Set menu or switches back to previous setting.

***CAUTION*** The indication of updating status of some equipment may disappear without indication of completion status because of the difference of software structure.

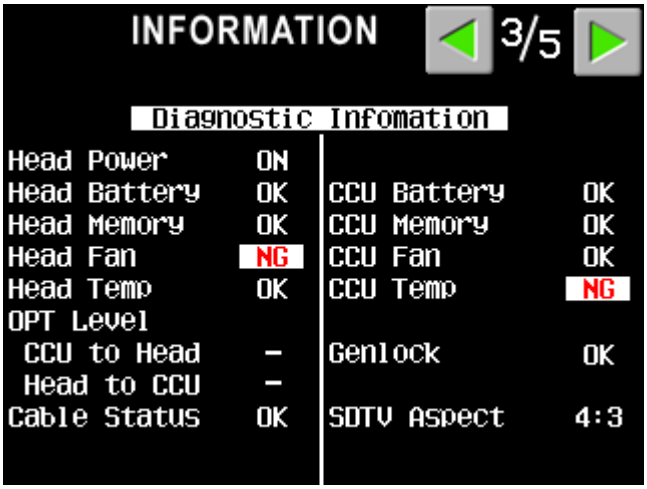
***Note*** If file data except RDF file is selected, following error message will come up. It is not available. Push “OK” to clear.


***CAUTION*** Confirm completion of firmware updating with VF, PM or Indicators of objective equipment, not only OCP LCD screen.

# 20. TROUBLE SHOOTING

## 20.1 When Alarm Lamp is flashing

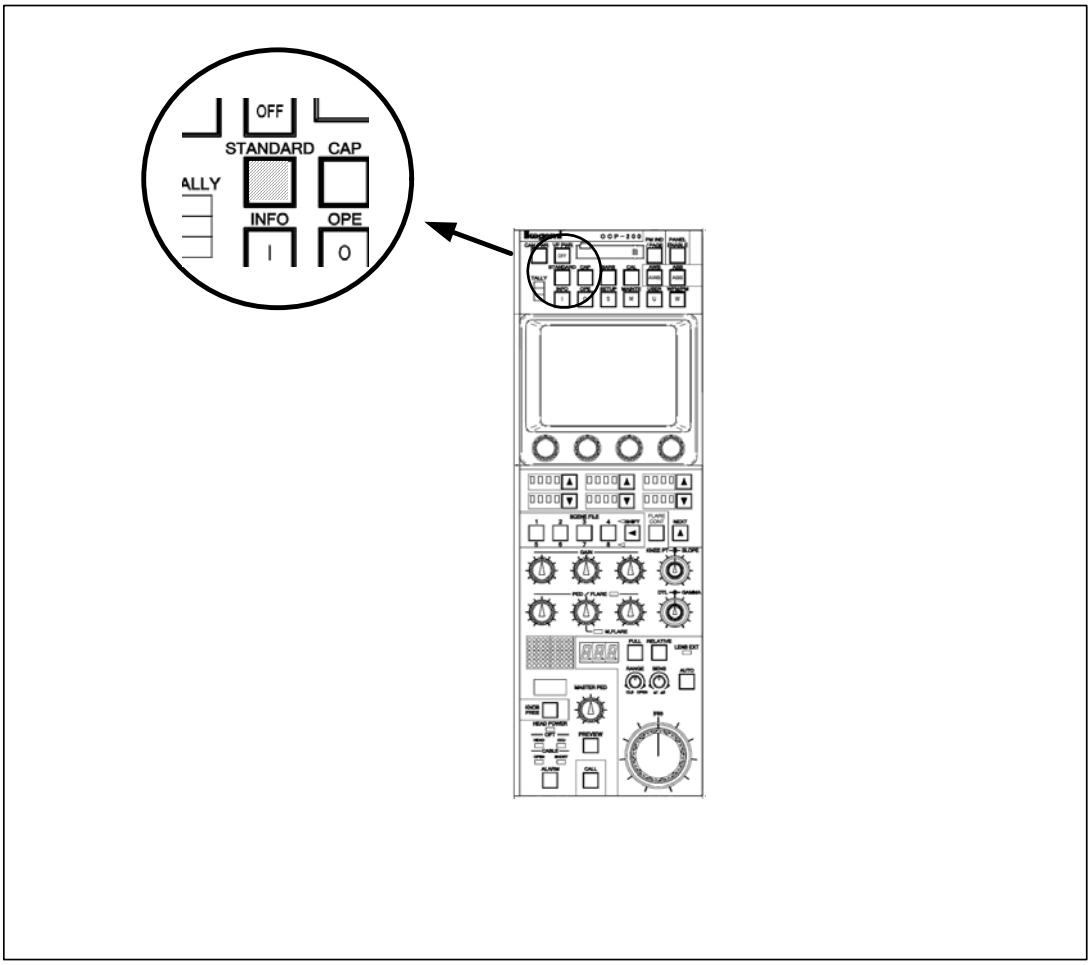
BS/CCU has function to check diagnostic of BS/CCU itself and Camera Head. Main Power Switch ON to start monitoring of diagnostic and continue to monitor through the operation.
If any trouble happened in BS/CCU or Camera Head, it senses the problem to blink ALARM Indicator on OCP. And it shows where the problem has happened and display Diagnostic Information page on Picture Monitor.
If PM IND/PAGE switch on OCP is pressed in case that ALARM indicator is not blinking, Diagnostic Information page will come up on Picture Monitor to check the condition.
When ALARM indicator(switch) is blinking, by pressing the switch, simple Diagnostic Information page can be displayed on LCD screen. This enables to confirm the status if PM is not connected to CCU/BS.




***Note*** With some type of BS/CCU, simple Diagnostic page on OCP may not be displayed, even though Diagnostic information is displayed on PM(Picture Monitor). This is not trouble but OCP could not get Diagnostic information from BS/CCU, because previous BS/CCU doesn't support this function.

## 20.2 OCP Reset Procedure

Reset can be done when OCP doesn't work correctly or at the hang-up. To reset OCP, press STANDARD Switch in 5 seconds. LCD display, LED and Switch Light turns off once, and release STANDARD Switch after confirming Light off. After reset processing completed, it will reboot automatically. If it doesn't recover once, do again to reset.
If reset can not be done with this procedure, turn off the power of the unit which supplies the power to OCP.



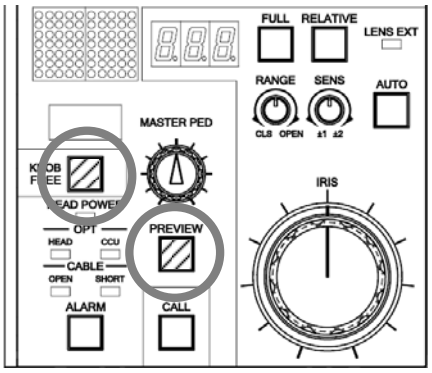
## 20.3 Initial Factory Setting

It is possible to clear Password or Control Panel setting to initial factory setting. In case to initialize just Panel Config. item, Refer to “18.2 Initialize of Panel Config.”.
Once this procedure has been started, it must be completed. If the procedure has failed, re-try again from Procedure 1.

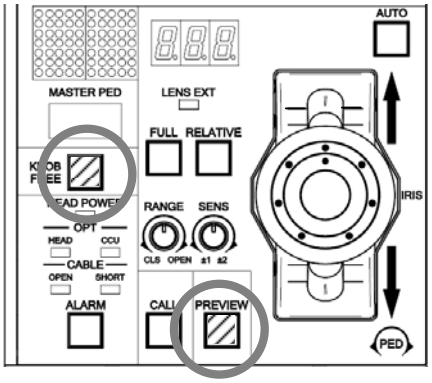
### 1) Procedure 1

In pressing KNOB FREE Switch, and press PREVIEW Switch in a couple of seconds.

VR TYPE




JOYSTICK TYPE

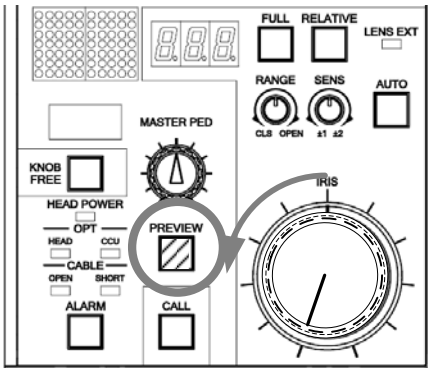



PREVIEW Switch blinks and it will enter into Initial Setting Mode.

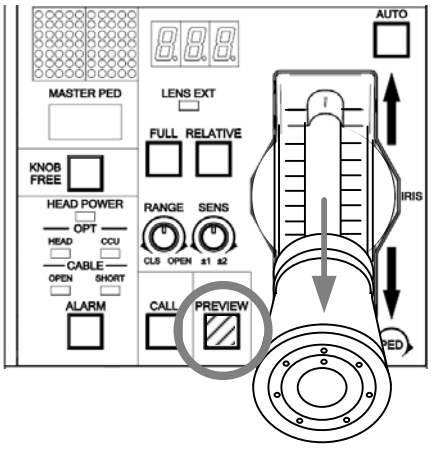
### 2) Procedure 2

Move Iris Knob or JOYSTICK Knob IRIS to close direction to the end.

VR TYPE




JOYSTICK TYPE

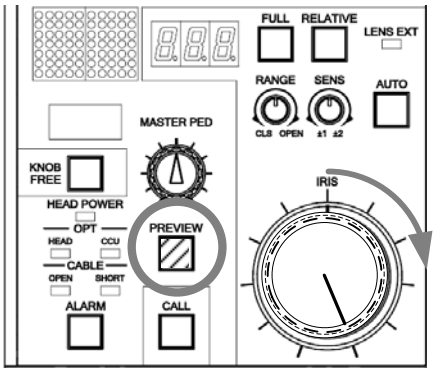



And push PREVIEW Switch. Operation is confirmed with beep sound.

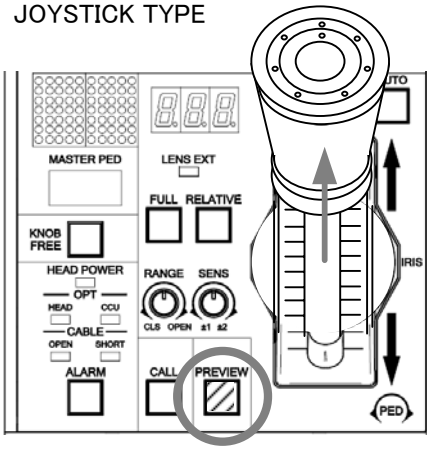
**3) Procedure 3**

Move Iris Knob or JOYSTICK Knob IRIS to open direction to the end. And push PREVIEW Switch. Operation is confirmed with beep sound.

VR TYPE




JOYSTICK TYPE




Then it is cleared to initial factory setting.

***CAUTION*** Various settings of Panel Config returned to the factory setting. Please set it again if necessary. Moreover, the clock function is not initialized in this operation. In abnormality, it is automatically initialized.
In case of Network Connection, Program Camera No. of connected BS/CCU is set to No. 1. It is necessary to set Program Camera No. again.

## 20.4 When “RAM DATA IS BROKEN” is displayed.

At the power on, RAM data is checked automatically. If data is damaged, following message window will comes up on LCD.

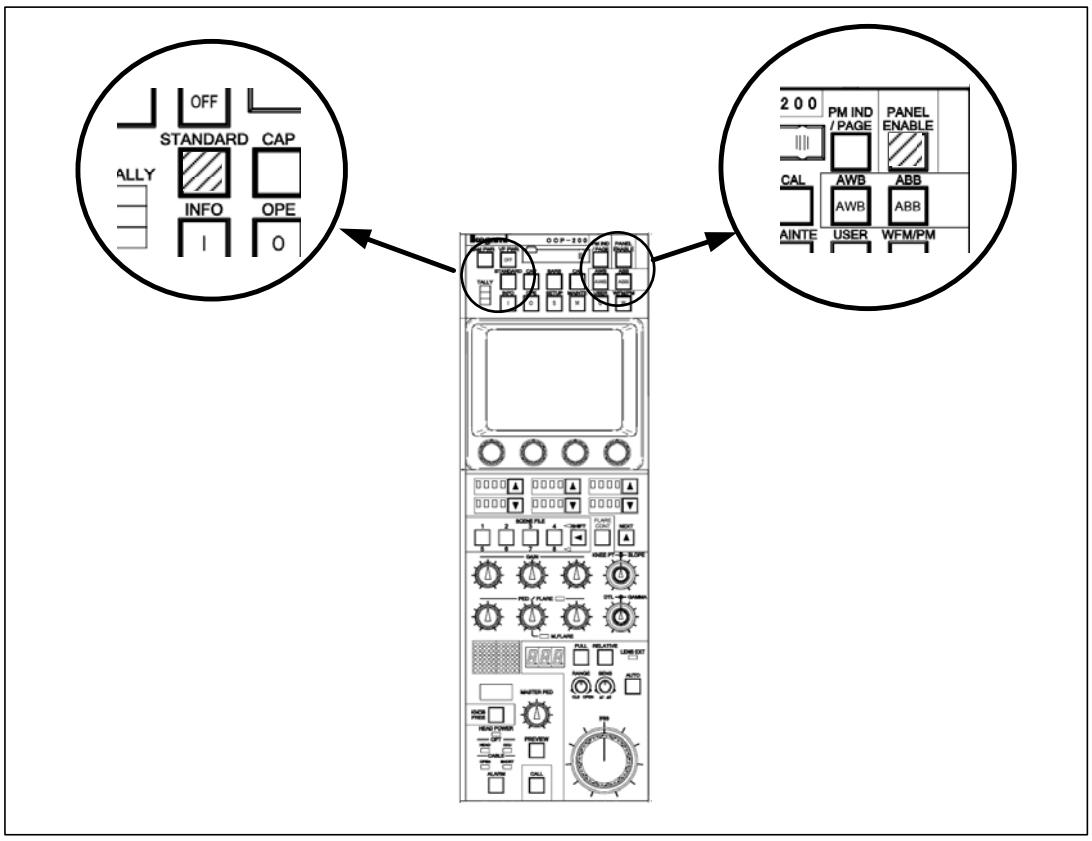
```
[ MESSAGE ]
RAM DATA IS BROKEN
Initial Factory Setting
```

In this case, it is necessary to execute “20.3 Initial Factory setting” to reset to default factory setting.
After OCP firmware update, the difference of RAM data area between previous version and new version may be detected as a failure. It is also necessary to execute “20.3 Initial Factory setting”.

***CAUTION*** If this message often comes up, Back-up RAM is damaged.

## 20.5 Trouble at Firmware Update

In case of power down of OCP-200 on the midway of firmware update or installing the firmware for the other model, OCP may not work properly.
If that is the case, press “STD” switch and “ENABLE” switch a couple of seconds at the same time. Perform firmware update again after update menu page has come up.




If update menu page doesn't come up, turn off the power of OCP-200 once. And turn on the power of OCP with keep pressing “ENABLE” switch. To perform power recycle of OCP, turn off the power of the unit which supplies power to OCP, or disconnect and connect again with COMMAND connector.

## 20.6 Trouble under Network Command connection

In case of Network Command connection, there is a possibility to trouble multiple units to the network at the same time. This might be the problem of network itself and command control doesn't work correctly. There are some factors to cause network problem as following.

- **Wiring Problem**
  Check coaxial cable, coaxial connector, F-type connector and 75 ohm termination plug. Most of problem concerns connector or cable.
  The shield of Coaxial cable(connector) for Network Command cable is not used for GND but for command signal, unlike a video signal. If the shield is connected to GND, it may cause network problem.

- **Network ID setup failure**
  If the network ID is duplicated, it may cause the problem not for duplicated units but also entire network.
  Network ID o the units can be checked by the Information menu page of MCP-200. Check network IDs to avoid duplication.

- **Unit failure**
  Network problem might be also caused by the failure of one unit. To confirm the defective unit, it is necessary to disconnect each unit from network. OCP-200 can be disconnected from the network by pressing “ENABLE” a couple of second to change to update page. To connect to the network again, press “ENABLE” switch again. MCP-200 can be disconnect and connect again to the network by same procedure as well.

- **Limitation of connected number at network**
  Eight MCP/OCP can be connected with one BS/CCU in the maximum. MCP is counted with one regardless of the state of the camera selection. MCP is not related in the state of the camera selection, and counted with one. The number of OCP that can be connected with one BS/CCU at the same time becomes seven when there is one MCP in the network. The number of OCP that can be connected at the same time becomes six when there are two MCP.
  When networking directly on BS/CCU without using the BS hub, the number that can be connected becomes four or less.

***CAUTION*** Disconnection from the network is not disconnected completely by hardware basis. If network driver device is defective, disconnection may not be available by above procedure. In that case, it is necessary to disconnect COMMAND connector by hardware basis.

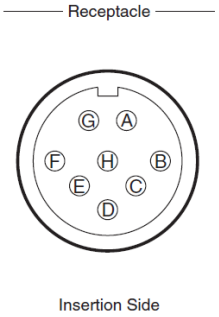
# 21. SPECIFICATIONS

## 21.1 Rating/Performance

| | | |
|---|---|---|
| Power Requirement | | DC+12V(+10 to +14V) |
| Power Consumption | | 8.7W (Typical) |
| Maximum Cable Length | | 50m(with CP Cable at Network Control) |
| | | 80m(with CP Cable at Serial command Control) |
| Operating Ambient Temperature | | 0 to +45 degree C |
| Storage Ambient Temperature | | -25 to +60 degree C. |
| Operating Humidity | | 30 to 90& without condensation |
| Dimensions | | |
| | JOY STICK TYPE | : 102x354x128.7mm |
| | VR TYPE | : 102x354x82mm (W/H/D) |
| Weight | | |
| | JOY STICK TYPE | : 1.55kg |
| | VR TYPE | : 1.4kg |

## 21.2 Pin Assignment for External Connector

### 1. COMMAND Connector



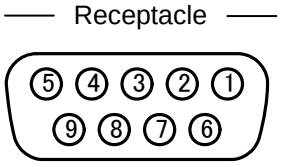

Connector to input/output various signals between BS/CCU and CP HUB.

Unit Side : PRC05-R8M
Cable Side : PRC05-199P9-8F (8pin Female Plug) or equivalent

| Pin | Name | Description | Direction | Interface |
|---|---|---|---|---|
| A | HED(+) | Serial Command Data Input(+) from BS/CCU to OCP | IN | |
| | A | Network Command Data Input/Output(A) between CP HUB and OCP | IN/OUT | |
| B | HED(−) | Serial Command Data Input(−) from BS/CCU to OCP | IN | |
| | B | Network Command Data Input/Output(B) between CP HUB and OCP | IN/OUT | |
| C | HEC(+) | Serial Command Data Input(+) from OCP to BS/CCU | OUT | |
| D | HEC(−) | Serial Command Data Input(−) from OCP to BS/CCU | OUT | |
| E | +12V IN | DC+12V Power Input | IN | |
| F | +12V RET | GND for DC+12V Power Input | OUT | |
| G | NC | ---------- | | |
| H | NC | ---------- | | |

## 2. EXT-1 Connector

Connector for System Expansion (Not used yet)

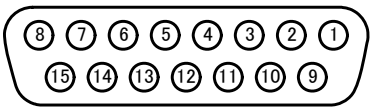



Unit Side : D-SUB 9 pin (Socket)
Cable Side : D-SUB 9 pin (Pin), Inch scale screw

| Pin | Name | Description | Direction | Interface |
|---|---|---|---|---|
| 1 | NC | ---------- | | |
| 2 | TX- | RS-422 TX(-) | OUT | |
| 3 | RX+ | RS-422 RX(+) | IN | |
| 4 | TX_GND | TX GND | | |
| 5 | NC | ---------- | | |
| 6 | RX_GND | RX GND | | |
| 7 | TX+ | RS-422TX(+) | OUT | |
| 8 | RX- | RS-422RX(-) | IN | |
| 9 | GND | GND | | |

### 3. EXT-2 (PREVIEW) Connector

Receptacle




Insertion side

Connector for System Expansion.

Unit Side : D-SUB 15 pin (Socket)
Cable Side : D-SUB 15 pin (Pin), Inch scale screw

| PIN | Name | Description | Direction | Interface |
|---|---|---|---|---|
| 1 | PV(+) | Preview Output + | OUT | |
| 2 | PV(−) | Preview Output − | OUT | |
| 3 | COM | Preview Output Common | OUT | |
| 4 | I/O 1 | I/O 1 | IN/OUT | |
| 5 | I/O 2 | I/O 2 | IN/OUT | |
| 6 | I/O 3 | I/O 3 | IN/OUT | |
| 7 | I/O 4 | I/O 4 | IN/OUT | |
| 8 | GND | GND | | |
| 9 | DATA(+) | Serial Output DATA(+) | OUT | RS-485 |
| 10 | DATA(−) | Serial Output DATA(−) | OUT | RS-485 |
| 11 | CLK(+) | Serial Output CLK(+) | OUT | RS-485 |
| 12 | CLK(−) | Serial Output CLK(−) | OUT | RS-485 |
| 13 | WR(+) | Serial Output WR(+) | OUT | RS-485 |
| 14 | WR(−) | Serial Output WR(−) | OUT | RS-485 |
| 15 | ＋12V | Power Output | | |

#### 1) Preview Output

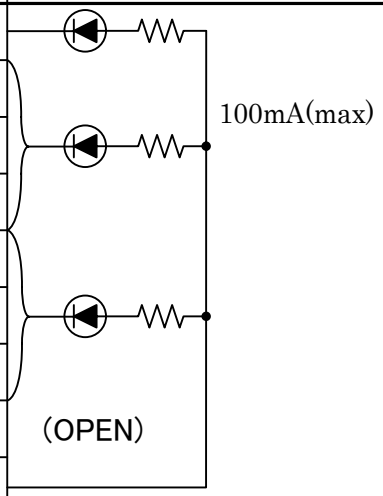
To Press PREVIEW Switch to contact PV(-) and COM.
Not to Press PREVIEW Switch to contact PV(+) and COM

**2) External I/O**

External I/O function is available. Because In/Out multi function pin allocation, either Input or Output function can be set. Default setting is Output.
The setting change of the function of 5pin/6pin can be done by Panel Config.

***Reference*** Refer to “18. PANEL SETUP(PANEL CONFIG.)” for detail.

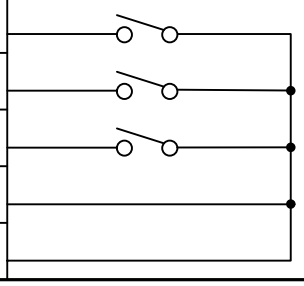
Output

| Pin No. | Name | Function | External Interface |
|---|---|---|---|
| 4 | $\overline{\text{R TALLY}}$ | R Tally Output |  |
| 5 | $\overline{\text{G TALLY}}$ | G Tally Output | |
| | $\overline{\text{EXTENDER}}$ | EXTENDER Output | |
| | $\overline{\text{ALARM}}$ | ALARM Output | |
| 6 | $\overline{\text{Y TALLY}}$ | Y Tally Output | |
| | $\overline{\text{EXTENDER}}$ | EXTENDER Output | |
| | $\overline{\text{ALARM}}$ | ALARM Output | |
| 7 | $\overline{\text{ENABLE}}$ | Enable Input | |
| 15 | +12V | Power Output | |



In case of connecting OCP-200 to the camera which doesn’t have Tally Input Connector, Tally input is available via OCP-200. For Tally Input operation, Enable Input Terminal (Pin No. 7) should be connected to GND. If OCP-200 is connected to BS/CCU, Tally input connection will be disabled.

Tally Input

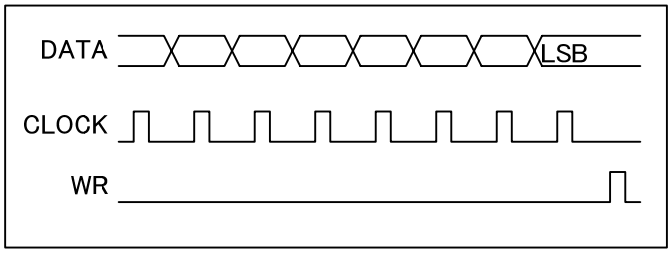
| Pin No. | Name | Function | External Interface |
|---|---|---|---|
| 4 | $\overline{\text{R TALLY}}$ | R Tally Input |  |
| 5 | $\overline{\text{G TALLY}}$ | G Tally Input | |
| 6 | $\overline{\text{Y TALLY}}$ | Y Tally Input | |
| 7 | $\overline{\text{ENABLE}}$ | Enable Input | |
| 8 | GND | Ground | |

***Note*** Input circuit is simple configuration. Then longer cable length or voltage difference may prevent correct control. In that case, external interface such as photo coupler interface box will be required and connect OCP-200 and Camera via Interface Box.

### 3) PGM Camera No. Output

PGM Camera No. of serial data signal can be output by three wire serial interface (RS-485). This output can be used for PGM Camera No. onto Tally Panel. The data is started from MSB.

3-Wire Serial Data format




PGM Camera No. Data Format

| | | MSB | | | | | | | | | | | LSB |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 11 | 10 | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 |
| Chip Select | Fixed | | | | | | | | | 0 | 0 | 0 | 0 |
| Single Figure | None | | | | | 1 | 1 | 1 | 1 | | | | |
| | 0 | | | | | 0 | 0 | 0 | 0 | | | | |
| | 1 | | | | | 0 | 0 | 0 | 1 | | | | |
| | 2 | | | | | 0 | 0 | 1 | 0 | | | | |
| | | | | | | | | | | | | | |
| | 7 | | | | | 0 | 1 | 1 | 1 | | | | |
| | 8 | | | | | 1 | 0 | 0 | 0 | | | | |
| | 9 | | | | | 1 | 0 | 0 | 1 | | | | |
| Double Figures | None | 1 | 1 | 1 | 1 | | | | | | | | |
| | 0 | 0 | 0 | 0 | 0 | | | | | | | | |
| | 1 | 0 | 0 | 0 | 1 | | | | | | | | |
| | 2 | 0 | 0 | 1 | 0 | | | | | | | | |
| | | | | | | | | | | | | | |
| | 7 | 0 | 1 | 1 | 1 | | | | | | | | |
| | 8 | 1 | 0 | 0 | 0 | | | | | | | | |
| | 9 | 1 | 0 | 0 | 1 | | | | | | | | |

Data Example

| | | MSB | | | | | | | | | | | LSB |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 11 | 10 | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 |
| PGM CAM No. | None | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 |
| | 5 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 |
| | 13 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 |
| | 46 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 |

# 22. CHANGING INFORMATION

# OCP-200

## OPERATION CONTROL PANEL

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**Published in Ikegami Factory of Ikegami Tsushinki Co.,Ltd.**

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