

OCP-200

Operation Control Panel

OPERATION MANUAL

(Temporary Version for V07)

Ikegami

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OCP-200 OPERATION CONTROL PANEL

OPERATION MANUAL

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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*1 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.

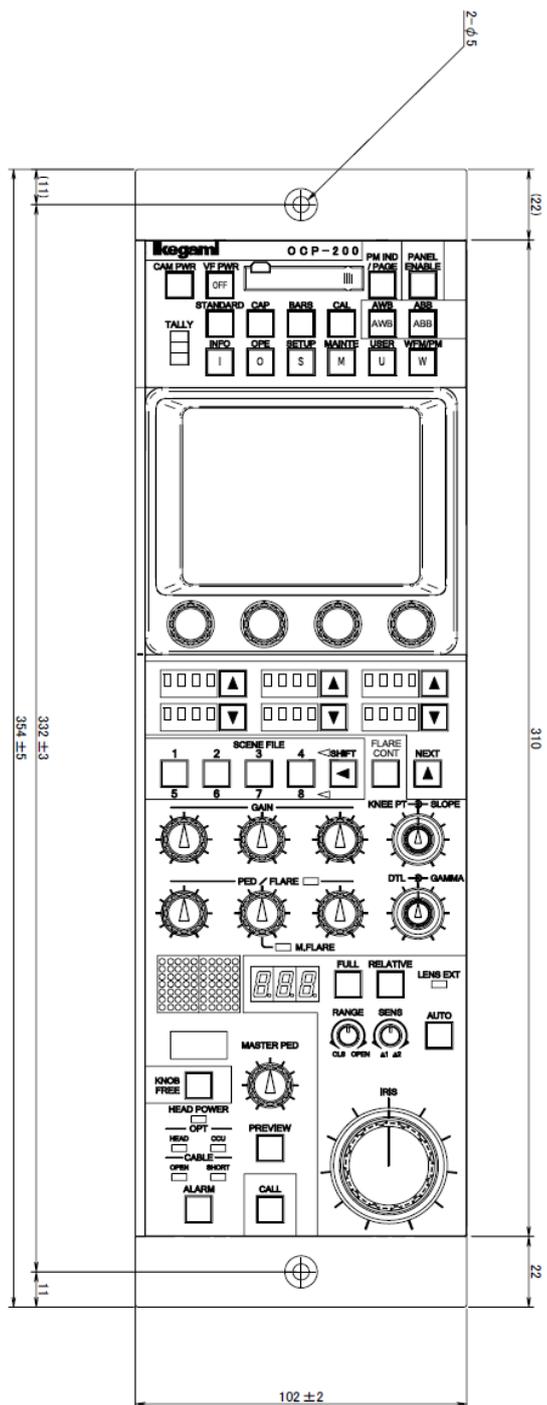
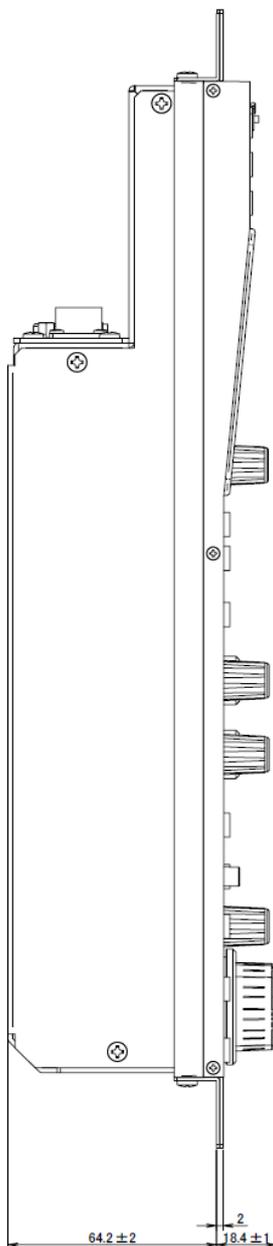
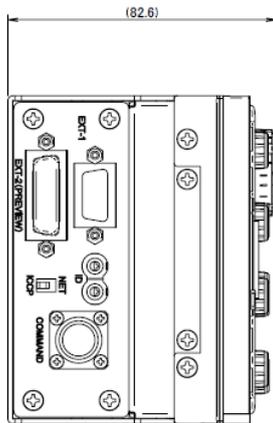
Note OCP control doesn't reflect to the camera if you operate the function of which camera doesn't have. Please find camera operation manual about control functions.

(*1: "Camera" described in this manual stands for both Camera Head and BS/CCU against Control Panel. Depending on each sentence, Camera, Camera Head or BS/CCU is used occasionally.)

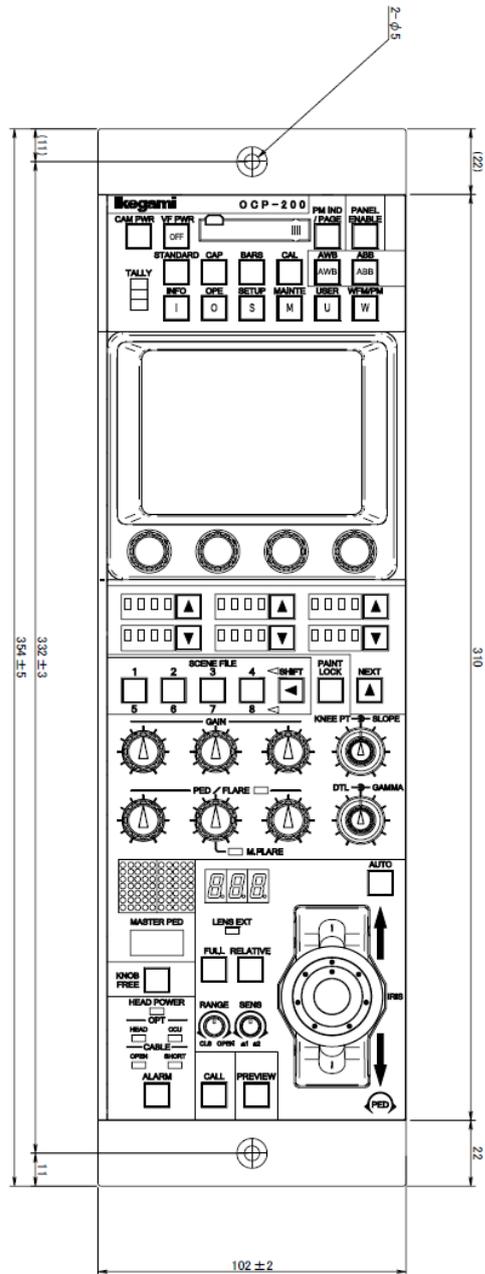
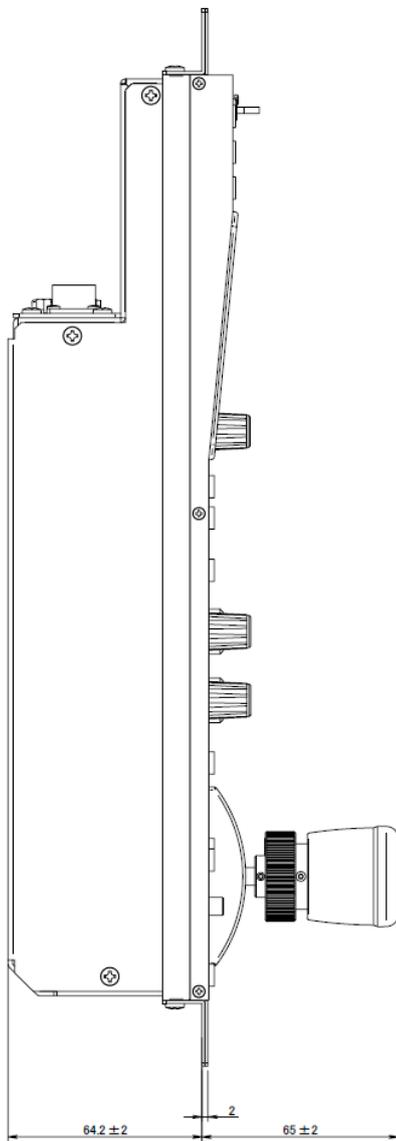
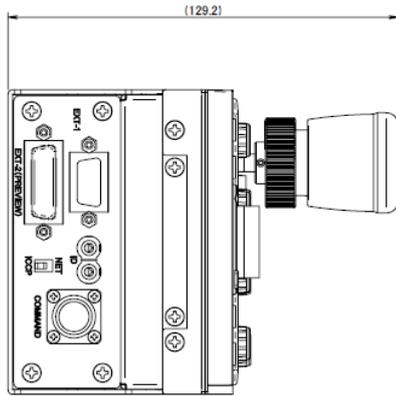
1-2 1. OUTLINE

1.3 External Appearance

1) VR TYPE

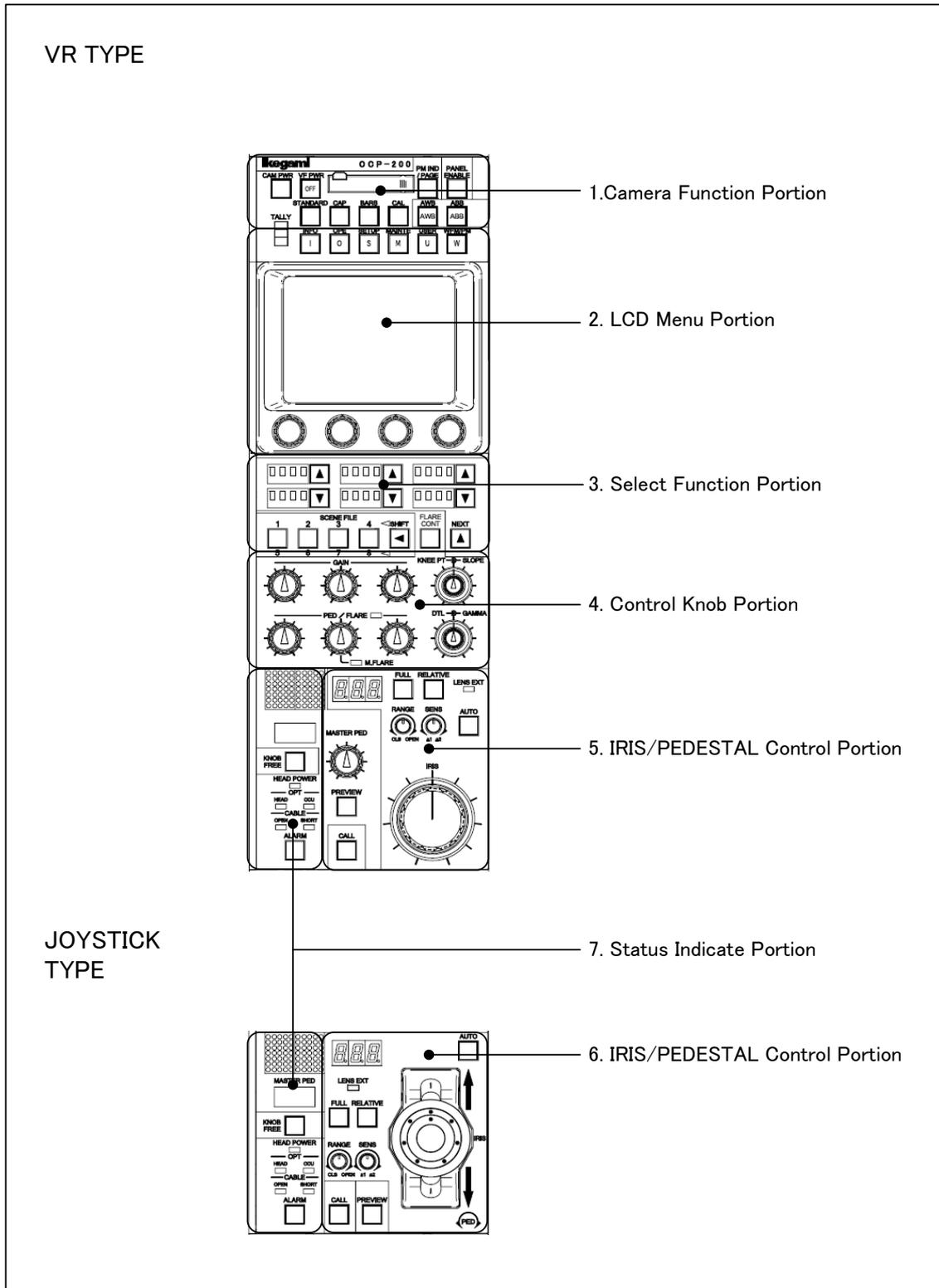


2) JOYSTICK TYPE

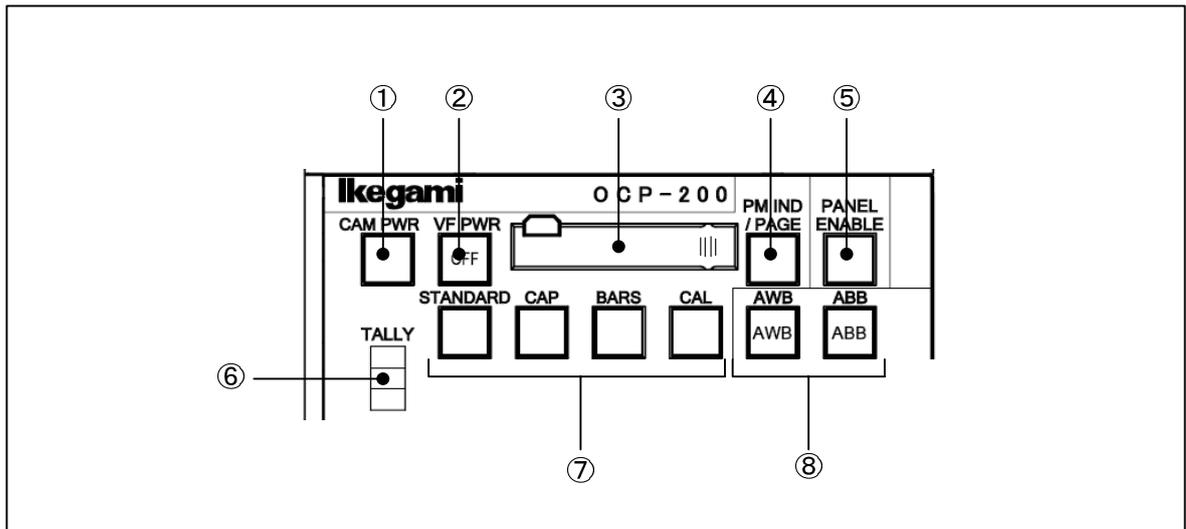


2. NOMENCLATURE and FUNCTIONS

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



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"

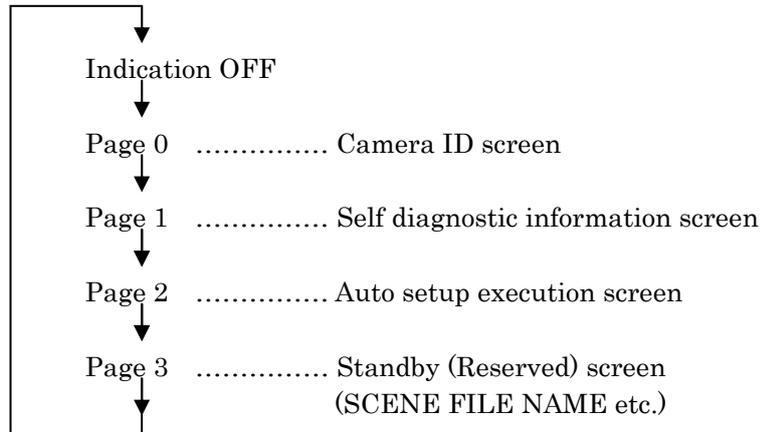
③ Memory Card Slot

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 indicator 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.

(See “9. STANDARD FUNCTION” for detail operation procedure.)

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

(See “6.2 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**

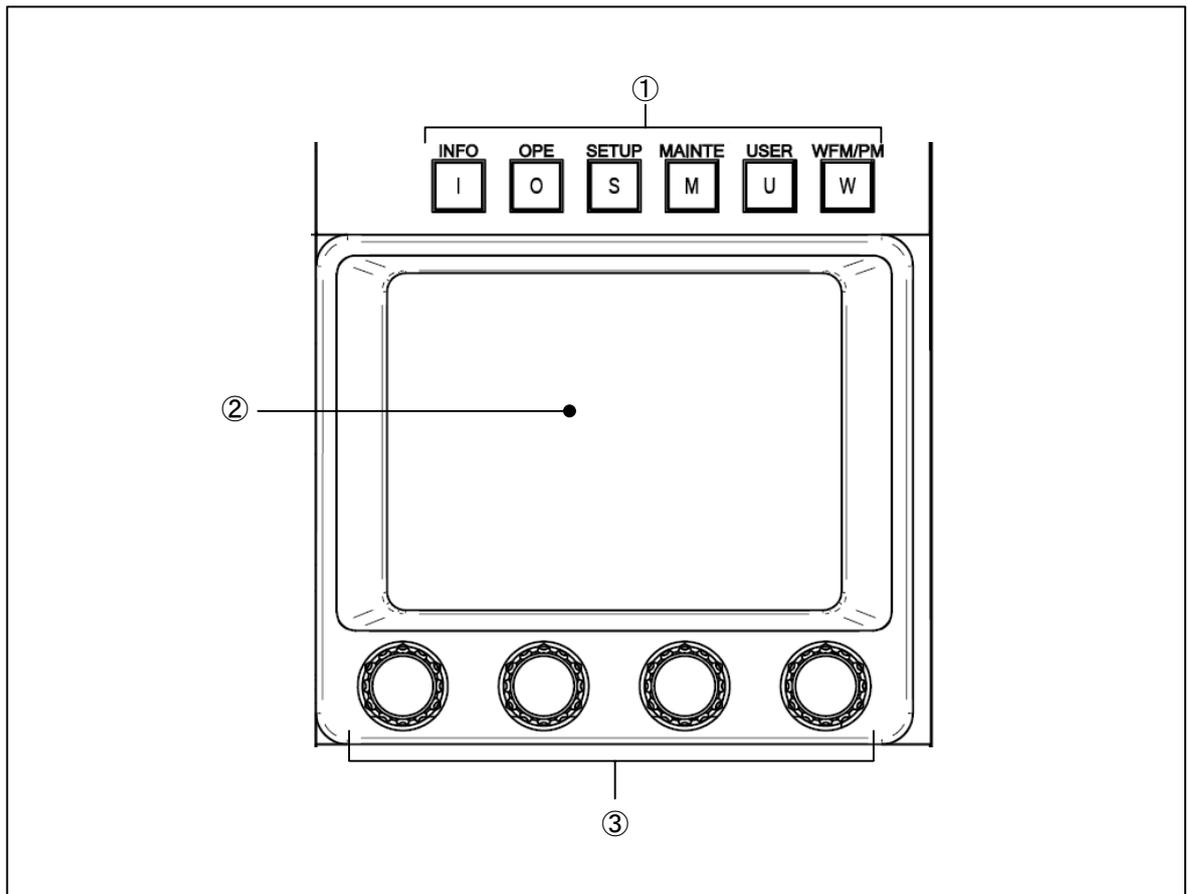
100% or 200% CAL signal is generated for the Calibration of the Video Processing Circuit.

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

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 not good. In case of NG, press this switch to clear lamp blinking.

2.2 LCD Menu Portion



① **FUNCTION Switch**

- **INFO Switch**

Indicates ON/OFF setting condition of Camera Head or BS/CCU on LCD display. *Not controllable yet

- **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.

- **MAINT Switch**

Enables LCD menu to maintenance mode.

- **USER Switch**

Can be assigned one function by the user. Registration required beforehand and the function can be called quickly. *Not controllable yet.

- **WFM/PM Switch**

Calls WFM/PM selection switch on LCD display.

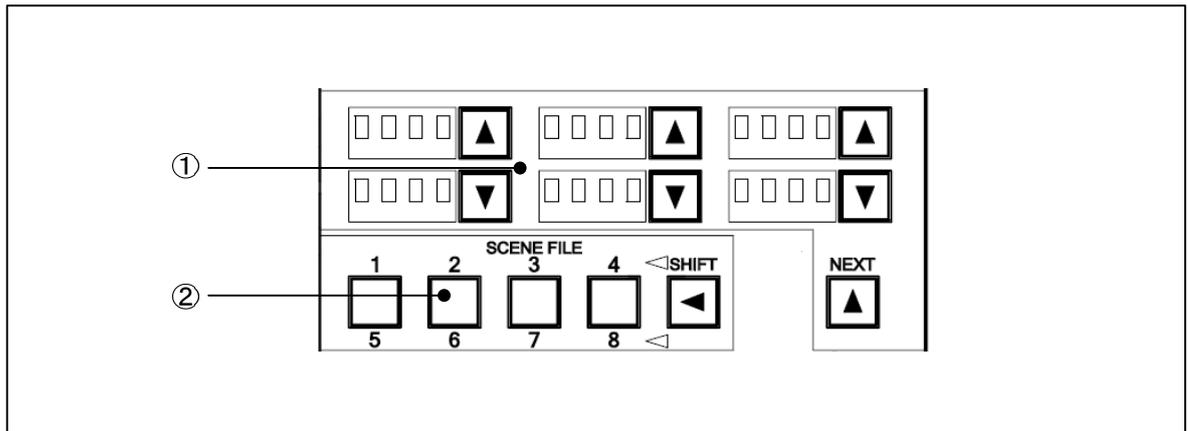
② **LCD Touch Screen**

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

(See “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 Portion① **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.

2-6 2. NOMENCLATURE and FUNCTIONS

Condition of , Switch for ND, CC and EFF.

- **Switch Lights** : OCP has control priority. Then Filter Position can be changable.
- **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.

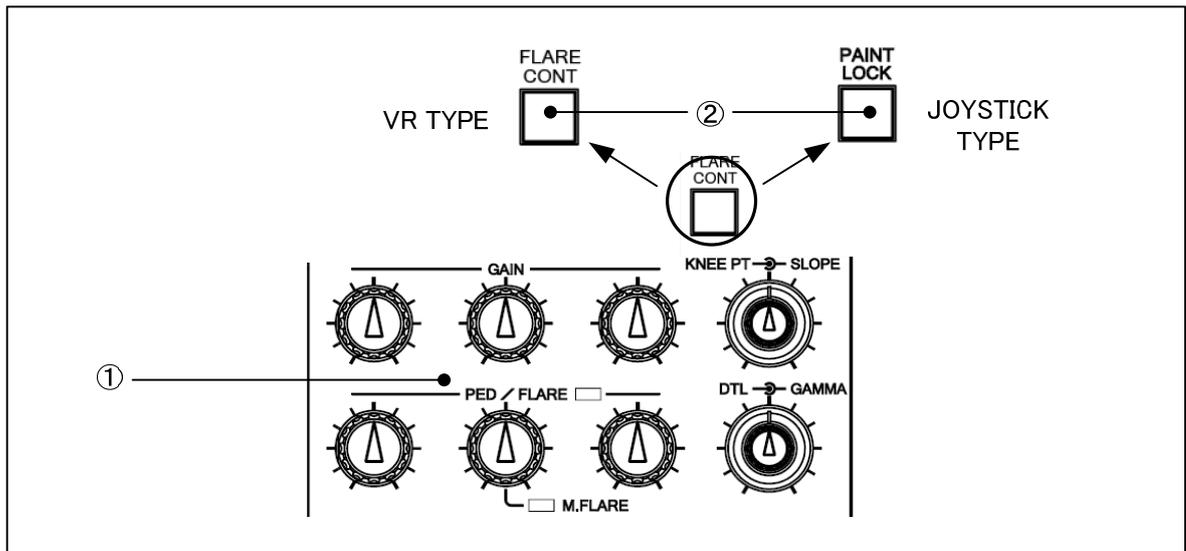
② SCENE FILE Switch

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 (See "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 can 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.

(See “11. PANEL SET-UP(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)**

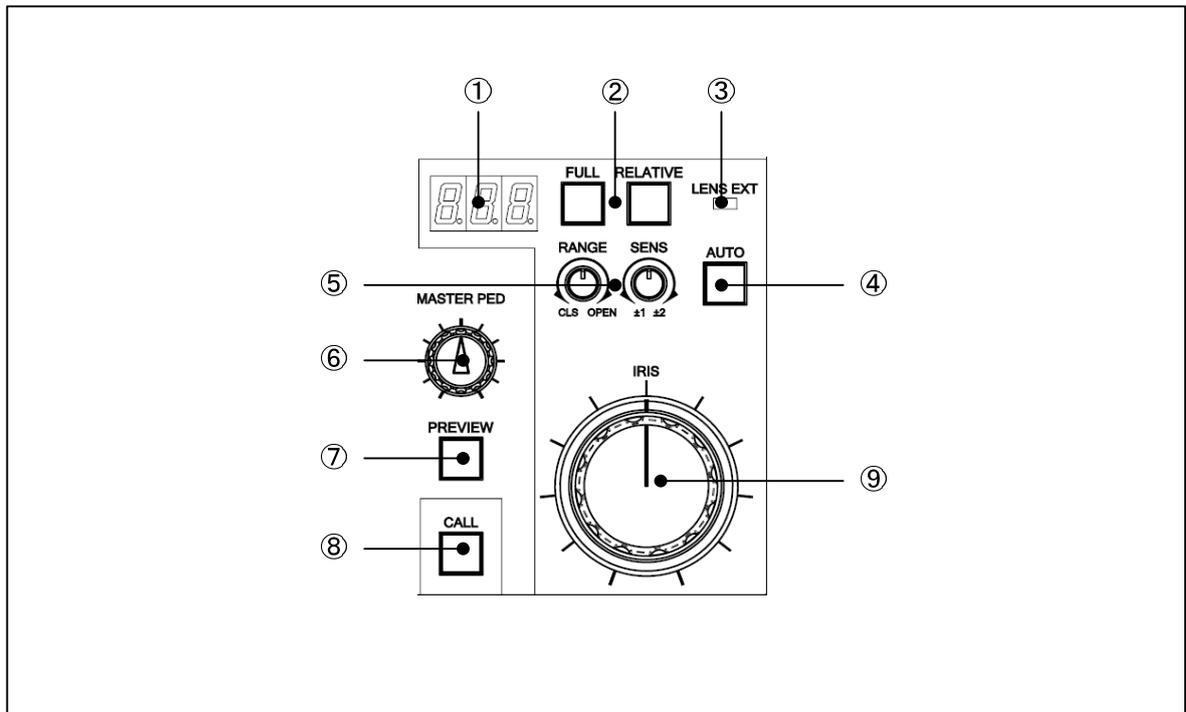
To set R/G/B PED/FLARE Knob for Pedestal control or Flare control. LED and this switch lights in case of Flare control mode.

② **PAINT LOCK Switch (JOYSTICK TYPE)**

If this switch is pressed to ON, GAIN and PED/FLARE Control Knob is 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)



2-8 2. NOMENCLATURE and FUNCTIONS

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.

(See separate volume of “Iris Control Procedure” 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.

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.

(See separate volume of “Iris Control Procedure” for the detail)

⑥ **MASTER PED Indicator (VR TYPE)**

Displays mater pedestal setting.

⑦ **PREVIEW Switch (VR TYPE)**

To output Preview video signal from EXT-2 (PREVIEW) connector or BS-HUB of which is connected to control LAN.

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.

⑧ **CALL Switch (VR TYPE)**

To press to light RED TALLY of camera head and BS/CCU.

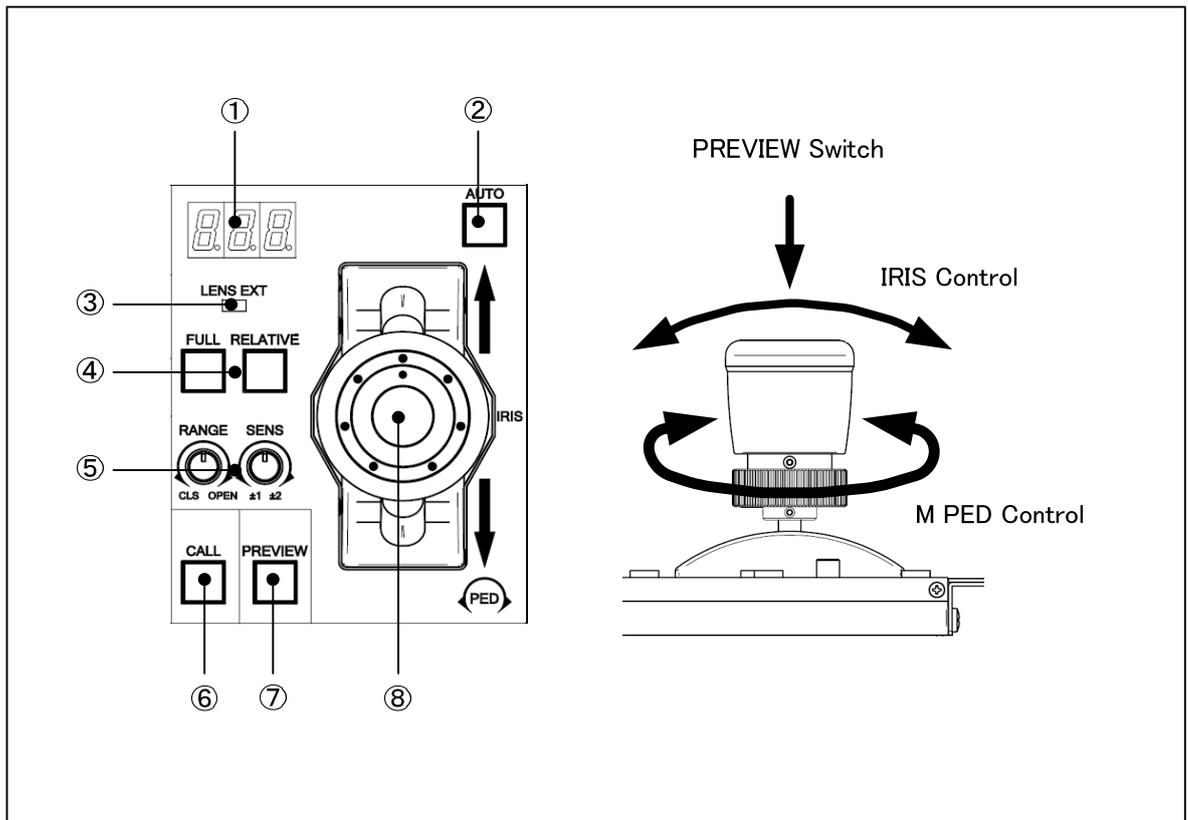
Call switch will light when call switch of camera head and BS/CCU is pressed.

⑨ **IRIS Control (VR TYPE)**

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

(See separate volume of “Iris Control Procedure” for the detail)

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.

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.

(See separate volume of “Iris Control Procedure” for detail operation.)

2-10 2. NOMENCLATURE and FUNCTIONS

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.

(See separate volume of “Iris Control Procedure” for the detail)

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)**

To output Preview video signal from EXT-2 (PREVIEW) connector or BS-HUB of which is connected to control LAN.

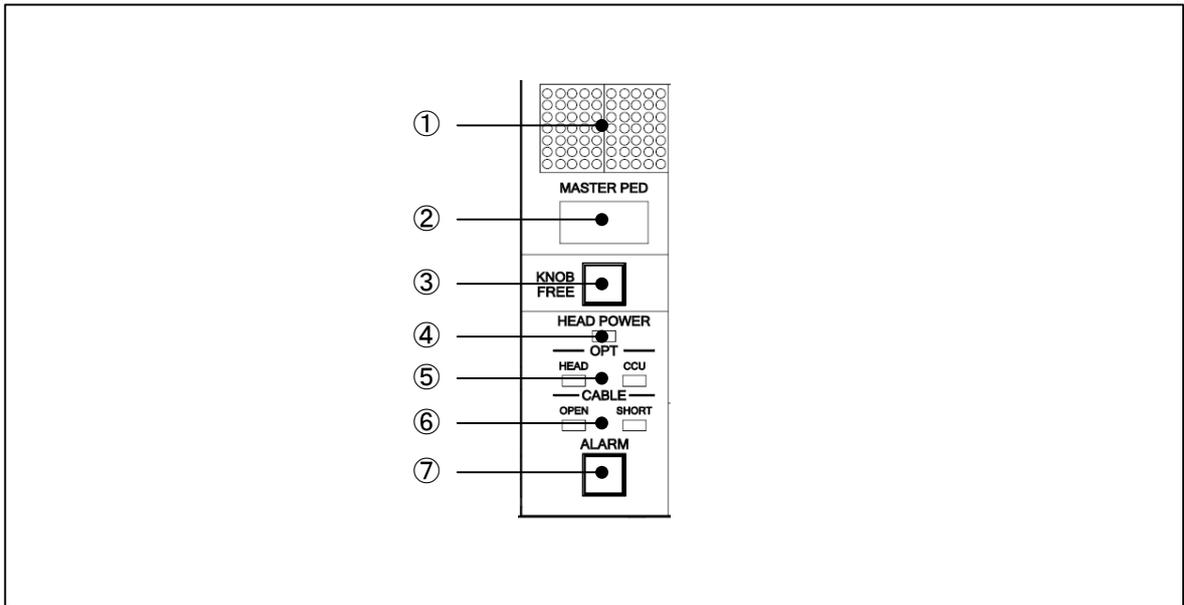
While pressing PREVIEW Switch, PV(-) and COM of EXT-2(PREVIEW) Connector are contacted. But PREVIEW Switch is not pressed, PV(+) and COM of EXT-2(PREVIEW) Connector are contacted.

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.

(See separate volume of “Iris Control Procedure” for the detail)

2.7 Status Indicate Portion (JOYSTICK TYPE)



① Camera Number Indicator

Program Camera Number of connected is displayed.
(See “4.5 MAINTEN” for setup procedure)

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. (See “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.

2-12 2. NOMENCLATURE and FUNCTIONS

④ **HEAD POWER Indicator**

Turns on at HEAD POWER “ON”.

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/Umber light or blinking, check and cure the cause of problem.

⑥ **CABLE Indicator**

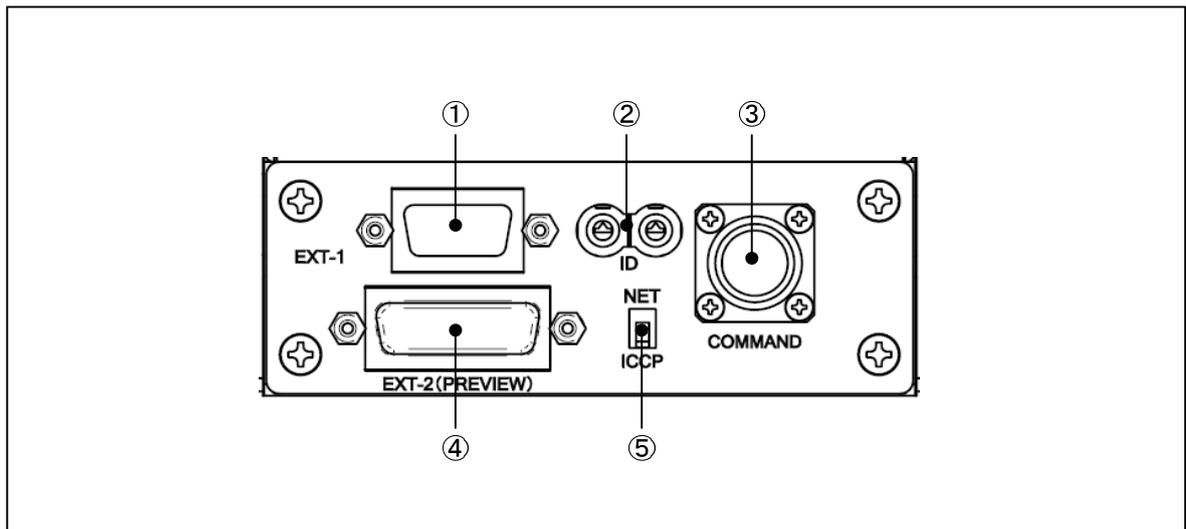
To indicate optic fiber or triax cable condition between Camera Head and BS/CCU. If any problem is detected, each indicator turns on.

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

⑦ **ALARM Indicator**

Alarm lamp will blink when any NG is found on the system by the detection of self-diagnosis function.

2.8 Connector panel



① EXT-1 Connector

The connector is for system expansion (Not used yet).
 (See “14.2 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.
 (See “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.
 (See “14.2 Pin Assignment for External Connector” for the detail of Pin Assignment)

⑤ NET/ICCP Changeover Switch

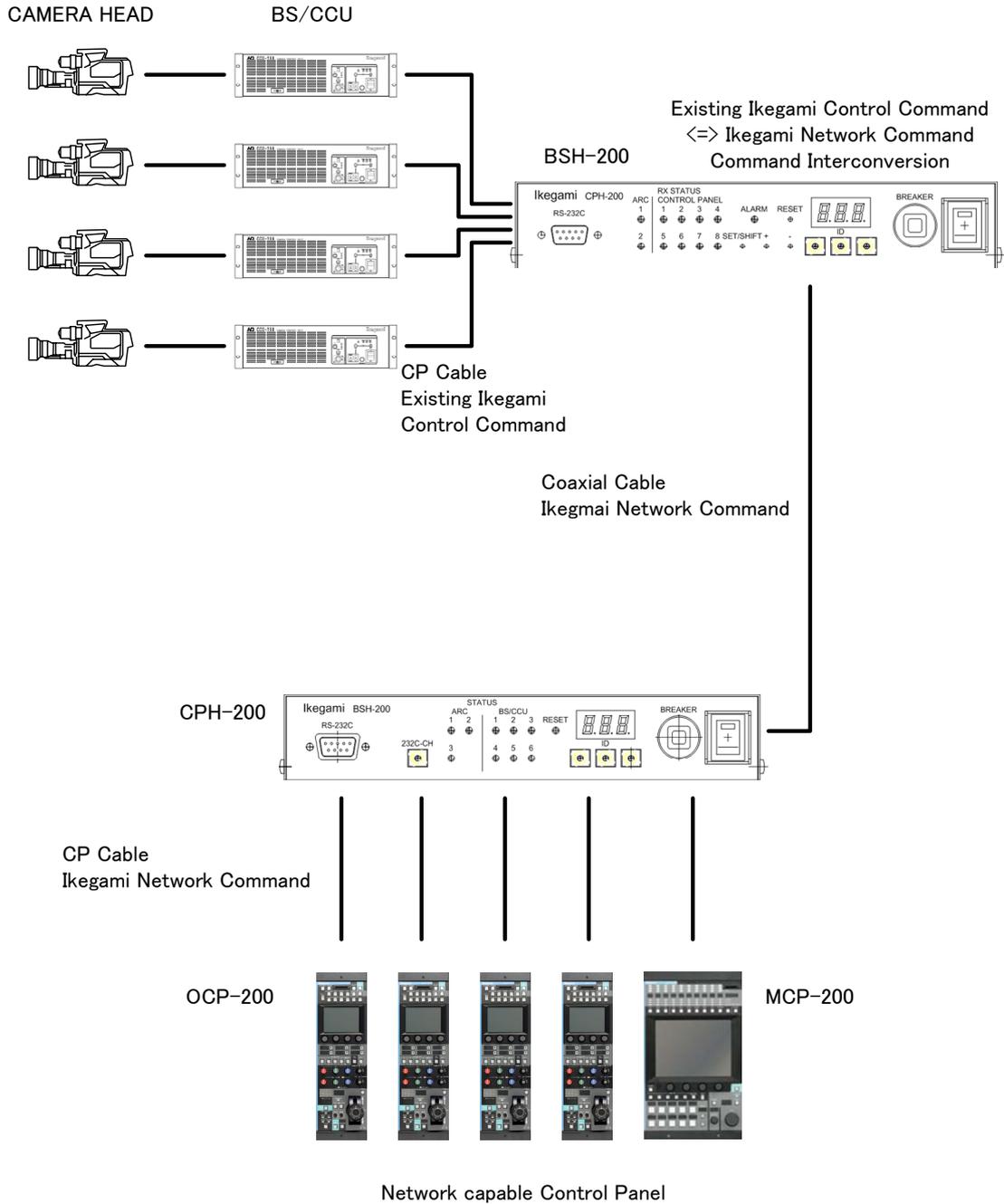
To change between Network connection and Ikegami Command (ICCP) connection.

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

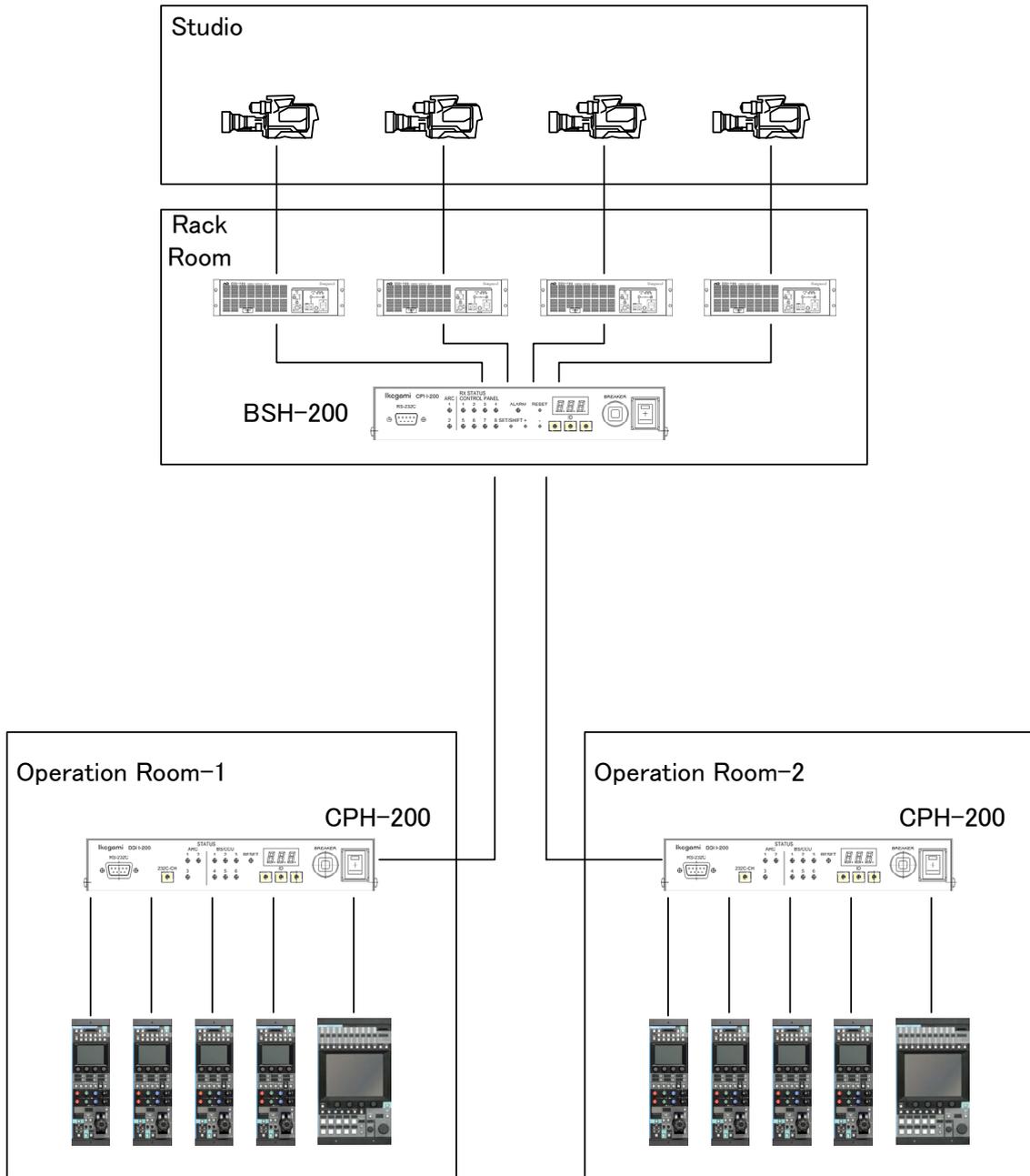
3.1 Concept image of Network



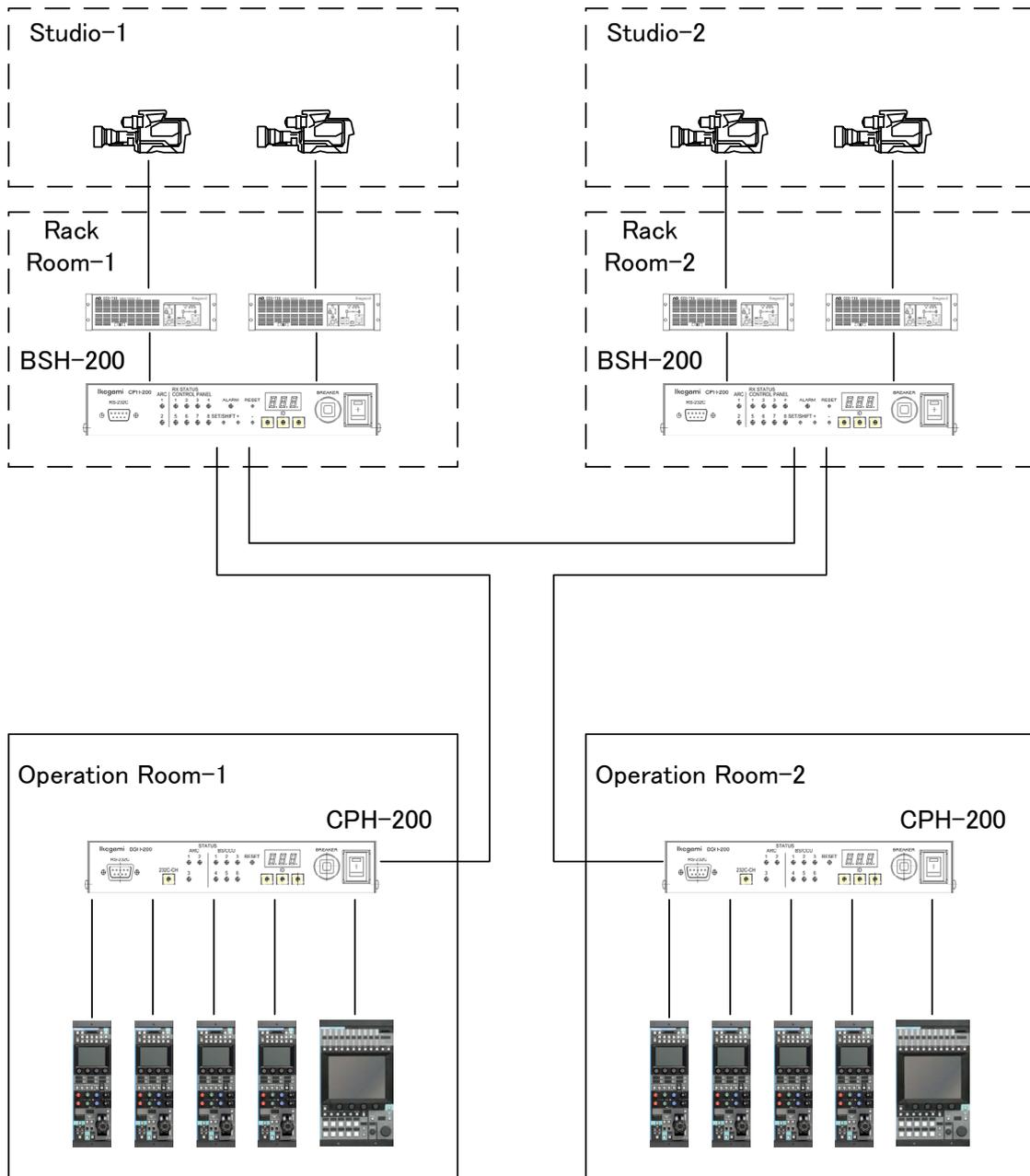
3-2 3. NETWORK OPERATION

3.2 Typical System Configuration

1) Case for 1 Studio and 2 Control Rooms



2) Case for 2 Studios and 2 Control Rooms

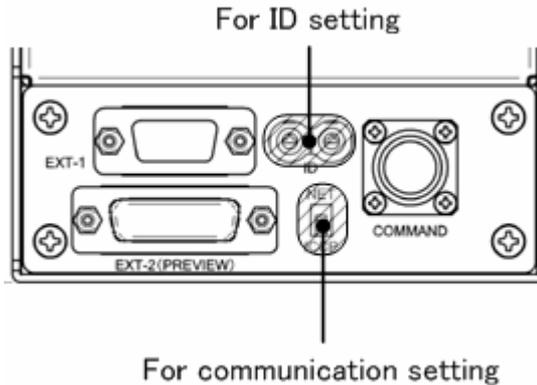


3.3 Network ID Setup

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).

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

See 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.

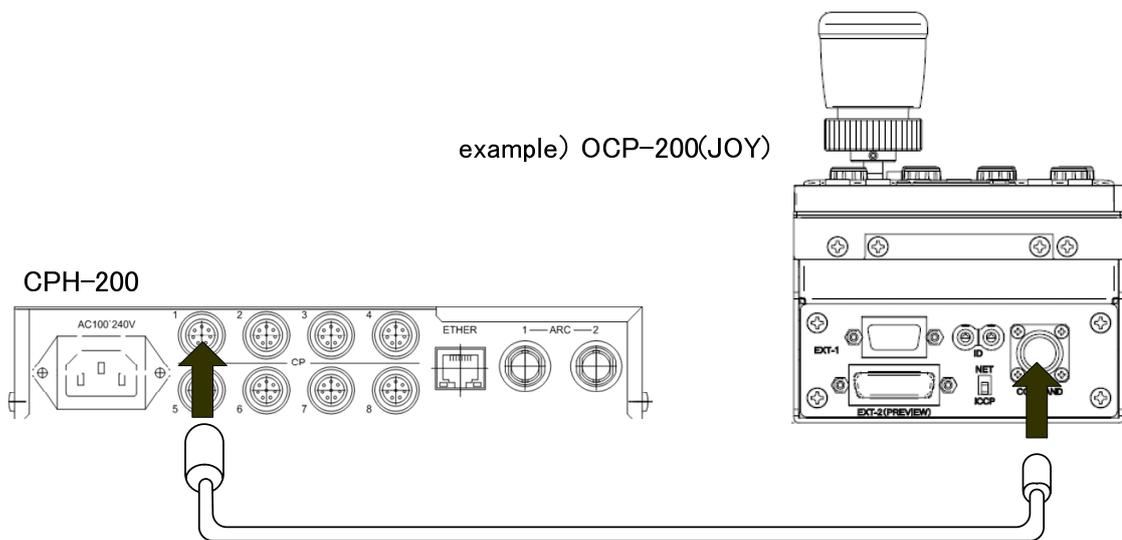
See operation manual such as “CPH-200/BSH-200 Setup Manual) or others for the detail of Setup

- **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.

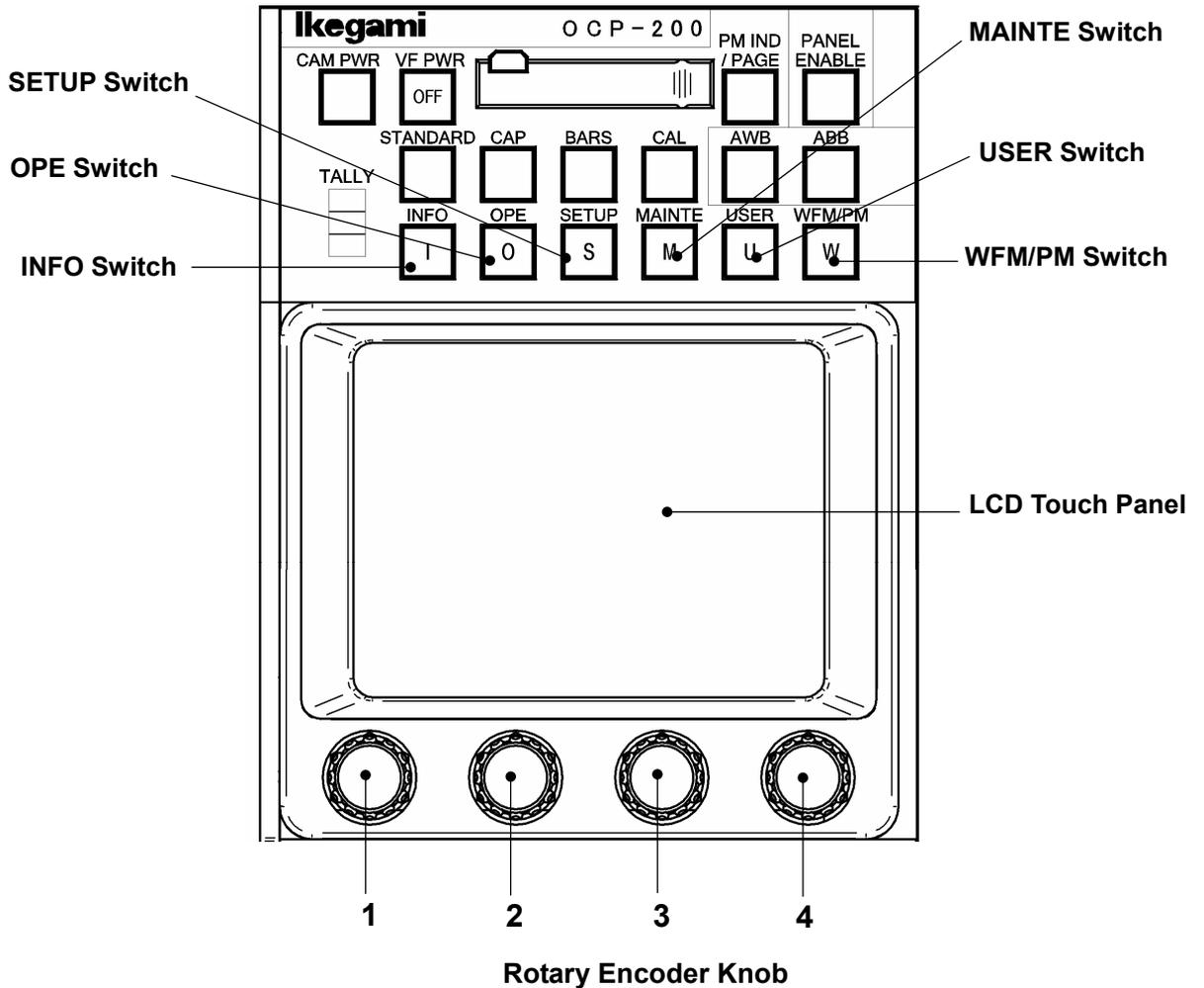


4. LCD MENU OPERATION

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.



4-2 4. LCD MENU OPERATION

- **INFO Switch**

Indicates setting status of Camera Head or BS/CCU on LCD display. *Not controllable yet

- **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**

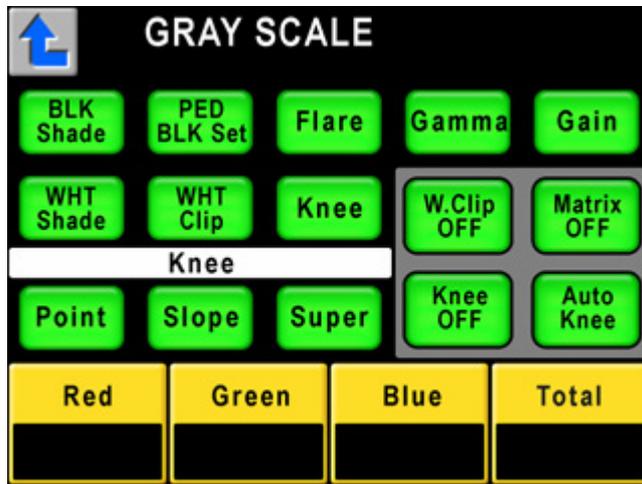
Enables LCD menu to maintenance mode.

- **USER Switch**

Can be assigned one control function by the user. Registering needed function beforehand, the control function will come up with quickly. *Not controllable yet.

- **WFM/PM Switch**

Indicates WFM/PM selection switch on LCD display. It will be active when either OPE switch or SETUP switch is "ON".



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 (*)	

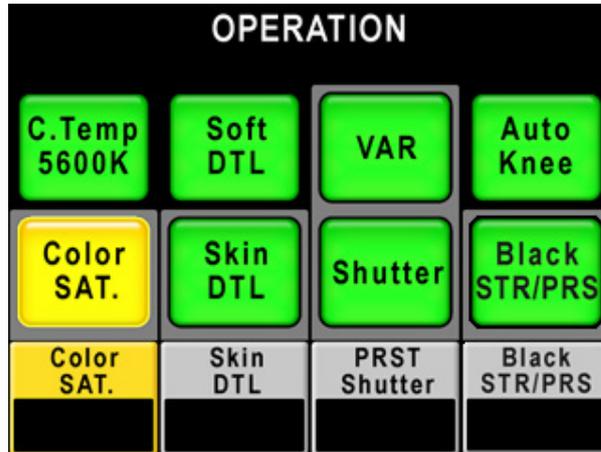
Note Depending on the type or functionality of Camera Head and BS/CCU, Rotary Encoder Knob can be controlled when icon is light gray. Since the functionality is not active when icon is light gray, changed parameter doesn't reflect to the video. If the parameter was changed when the function was off, there is a possibility to reflect to the video when the function turns on.

4.2 INFO

The INFO switch does not work yet.

4.3 OPE

When OPE switch is turned ON, the following screen menu is displayed.



C.Temp 5600K

Used to select ON/OFF the electric color compensation 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 Rotary Encoder K F the Auto Knee correction Mode.

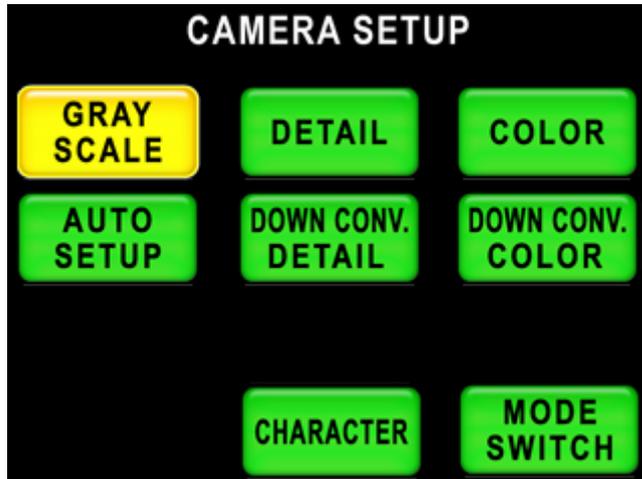
Black STR/PRS

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.

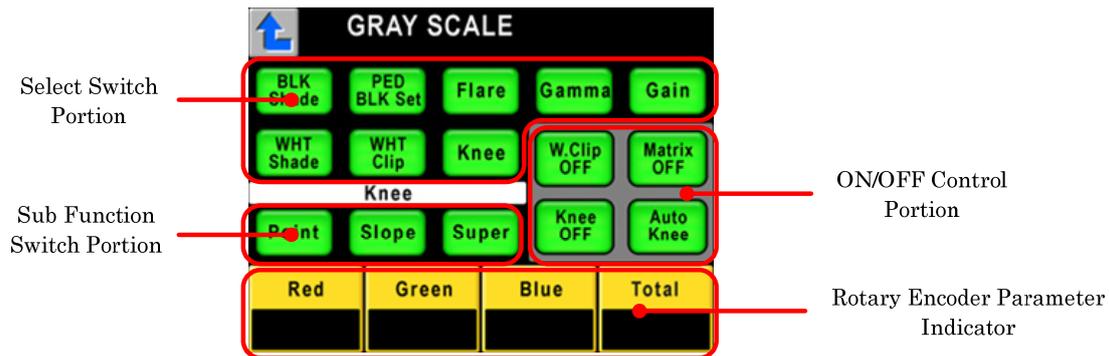
4.4 SETUP

When SETUP switch is turned ON, 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.

GRAY SCALE (CAMERA SETUP)

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	
	Step Gamma		BLK STR/PRS	Black Stretch/ Press ON/OFF
			Step	Step Gamma Select

*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	Gain Adjustment
		W.Clip OFF	White Clip ON/OFF
		Matrix OFF	Matrix ON/OFF
		Knee OFF	Knee ON/OFF
		Auto Knee	Auto Knee 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

*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 Balance		DTL Black-White Balance Adjustment
			DTL Balance Adjustment
	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
	DTL OFF		DTL ON/OFF
	Zoom Track		Zoom Tracking 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		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
	DTL OFF		DTL ON/OFF
	Skin DTL		Skin DTL ON/OFF
	Z.Track Skin		Zoom Tracking DTL ON/OFF

*Gray shadowed items are controlled by Rotary Encoder Knob.

4-8 4. LCD MENU OPERATION

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	

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 activate 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

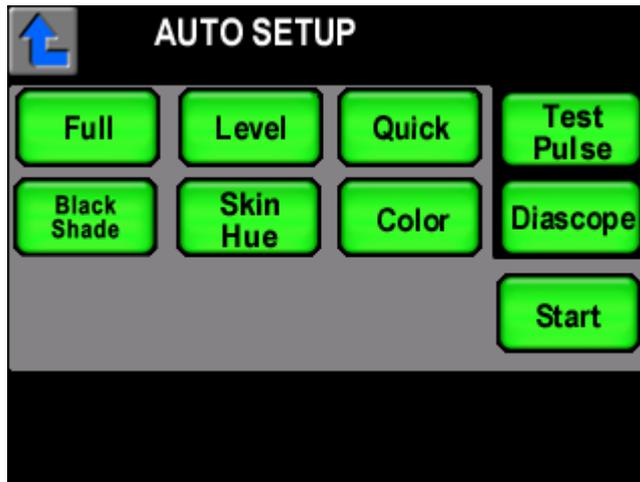
*Gray shadowed items are controlled by Rotary Encoder Knob.

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 / Y1	R Hue	Red Hue Adjustment
		R SAT.	Red Saturation Adjustment
		Y1 Hue	Yellow Hue Adjustment
		Y1 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
- Level
- Quick
- Black Shade
- Skin Hue
- Color

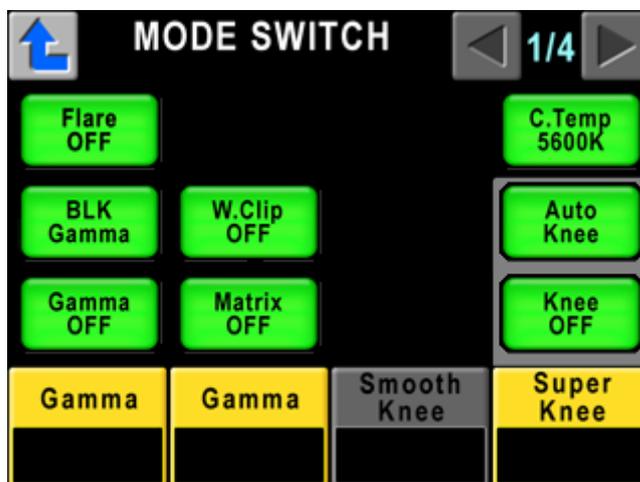
Above mentioned 5 items can be setup automatically. Select the item by switch icon and press Start icon to execution. Set "Test Pulse" or "Diascope" ON/OFF occasionally.

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.

Note Color DETAIL and Auto Hue Detect function in Custom Color 1/2 can be set with each control page.

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.



4-12 4. LCD MENU OPERATION

MODE SWITCH (Setup)

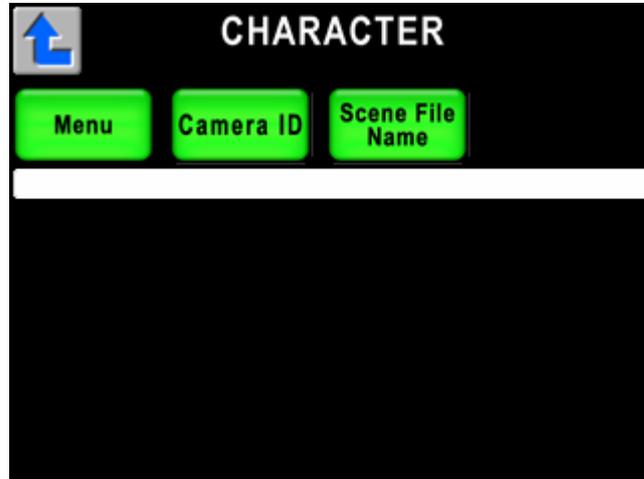
Page	ON/OFF, Function	Control subject
Page1	FLARE OFF	Flare ON/OFF
	GAMMA OFF	Gamma ON/OFF
	BLK GAMMA	Black gamma ON/OFF
	W.Clip OFF	White clip ON/OFF
	Matrix OFF	Matrix ON/OFF
	C.Temp 5600K	Electronic color temperature correction 5600K ON/OFF
	Knee OFF	Knee ON/OFF
	Auto Knee	Auto knee ON/OFF
	Gamma	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	Electronic color temperature correction 5600K ON/OFF
	CSTM Color 1	Custom color 1 ON/OFF
	CSTM Color 2	Custom color 2 ON/OFF
	Matrix OFF	Matrix ON/OFF
	Matrix	Matrix selection
Page4	Super V	Super V ON/OFF
	Shutter	Electronic shutter ON/OFF
	VAR.	Variable shutter ON/OFF
	Black STR/PRS	Black Stretch/ Press ON/OFF
	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;

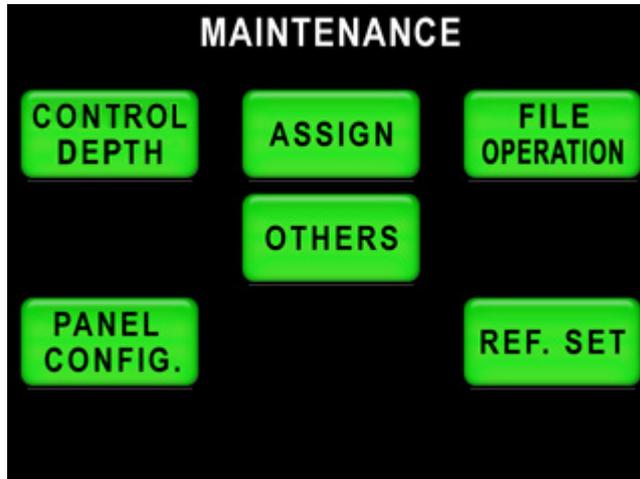
- **Camera Menu**
- **BARS TITLE**
- **Camera ID**
- **Scene File Name**



See "10. CHARACTER SETUP" for detail.

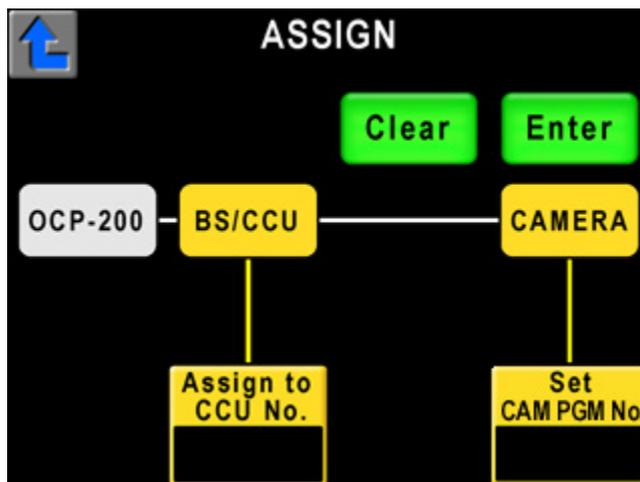
4.5 MAINTENANCE

When MAINTENANCE switch turns ON, LCD menu below will come up.



1) ASSIGN (MAINTENANCE)

To set assignment of OCP to BS/CCU.



To set Camera Program No. by Rotary Encoder Knob 4. Assigned PGM Camera No. is saved in the memory of OCP and to send the command to Camera Head. Camera Head which has Camera No. Display function, save Camera No. Data and display Camera No. At the camera power on or changing panel assignment, OCP indicates saved PGM Camera No. and request PGM Camera No. to Camera Head. After receiving answer of PGM Camera No. from Camera Head and update Camera No. of indicator on OCP. If the answer is not received, update of PGM Camera No. indication is not done and previous Camera No. is remained.

By Rotary Encoder Knob 2, set BS/CCU No. to assign to OCP.

To cancel the setting, keep pushing Clear icon 2 seconds.

To enter the setting, keep pushing Enter icon 2 seconds.

In case of Ikegami command control, only PGM Camera No. can be set.

Note: At the multiple camera operation including the camera which has Camera No. Indication function and which doesn't have this function together, Camera No. indication may become confusing each other.

2) FILE OPERATION (MAINTENANCE)

See "7. MEMORY CARD OPERATION".

3) OTHERS (MAINTENANCE)

OTHERS (MAINTENANCE)

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

*Gray shadowed items are controlled by Rotary Encoder Knob

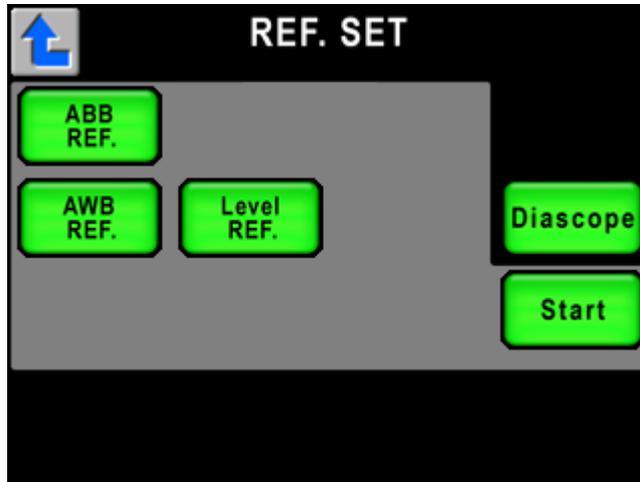
4-16 4. LCD MENU OPERATION

4) PANEL CONFIG. (MAINTENANCE)

See “11. PANEL SET-UP(PANEL CONFIG.)”

5) REF. SET (MAINTENANCE)

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



- ABB REF.
- Color REF.
- AWB REF.
- Level REF.

Above mentioned 4 items are setting items for reference. Select the item by switch icon and press and hold Start icon to execution. Set “Diascope” ON/OFF occasionally.

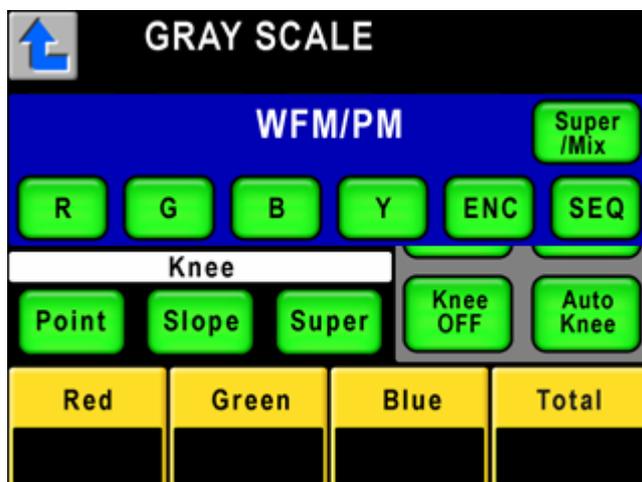
If reference setting was incomplete, Start switch will blink for alert. By pressing Start icon to cancel error condition. Or pressing Start icon on execution to stop reference setting procedure.

4.6 USER

Not controllable yet.

4.7 WFM/PM

To press WFM/PM Switch to “ON”, below LCD Menu will come up overlaid onto current control page



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

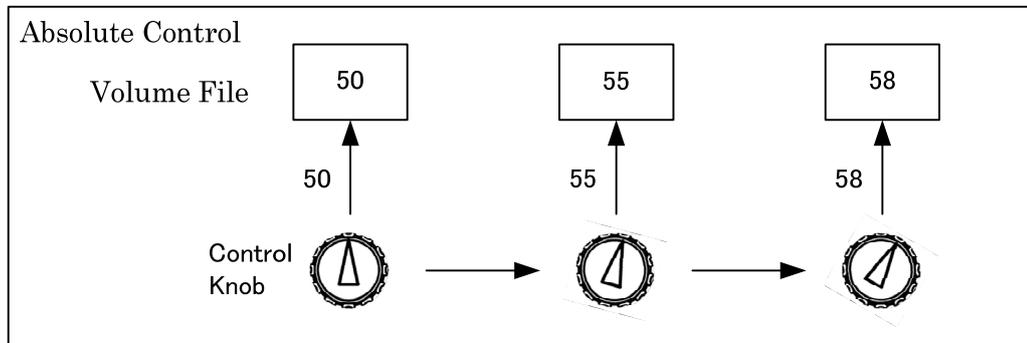
5.1 Camera Data Control

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 .

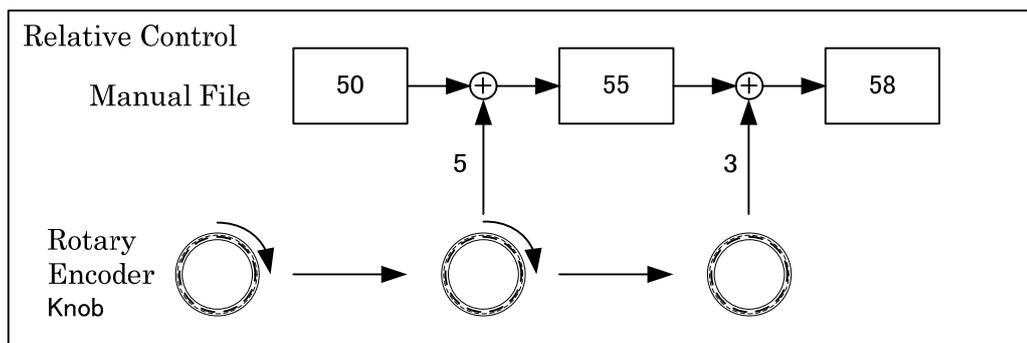


It is impossible for Absolute controlled Control Panel to control multiple cameras at the same time.

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.

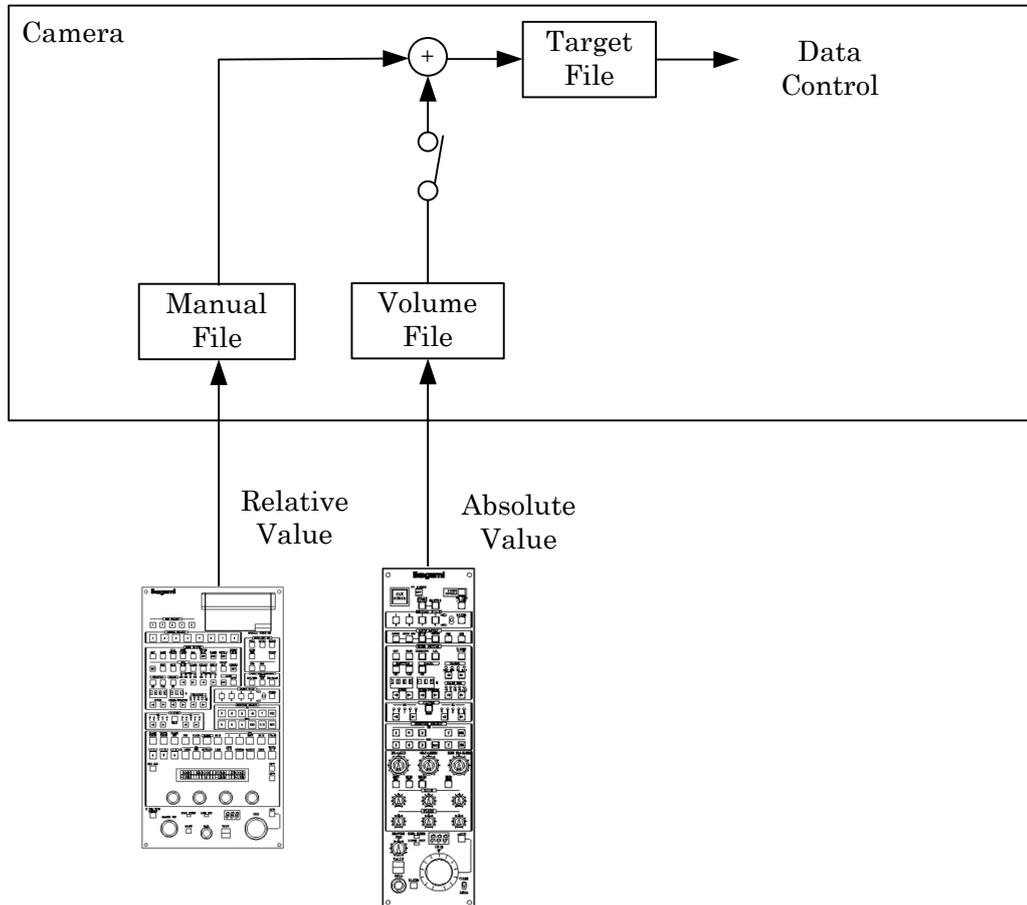


It is possible for Relative controlled Control Panel to control multiple cameras at the same time.

5-2 5. CONTROL KNOB OPERATION

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.

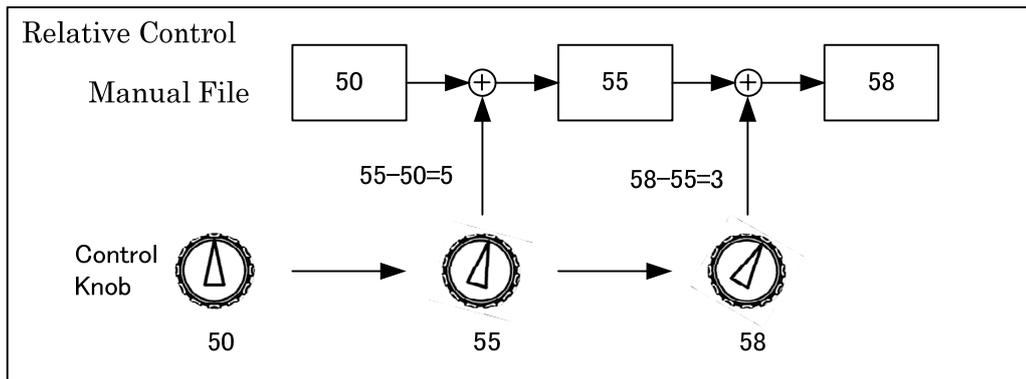
	Merit	Demerit	Purpose
Absolute Control	Control value is determined by volume rotation angle. So control feeling is good. By Rotating to original position, control value is back to original value.	Only one control panel can connect to one camera at the same time.	Suitable for Operation
Relative Control	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.

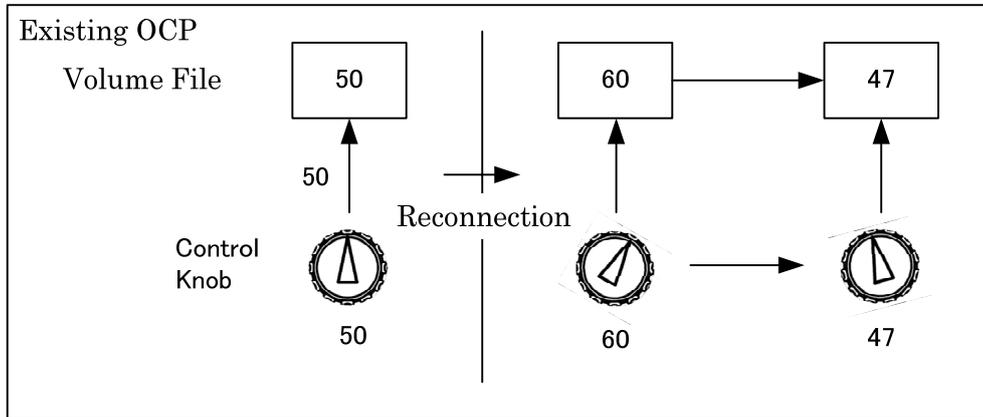
And Rotary Encoder Knob control with LCD Menu, camera is controlled by relative control value as same as existing MCP.



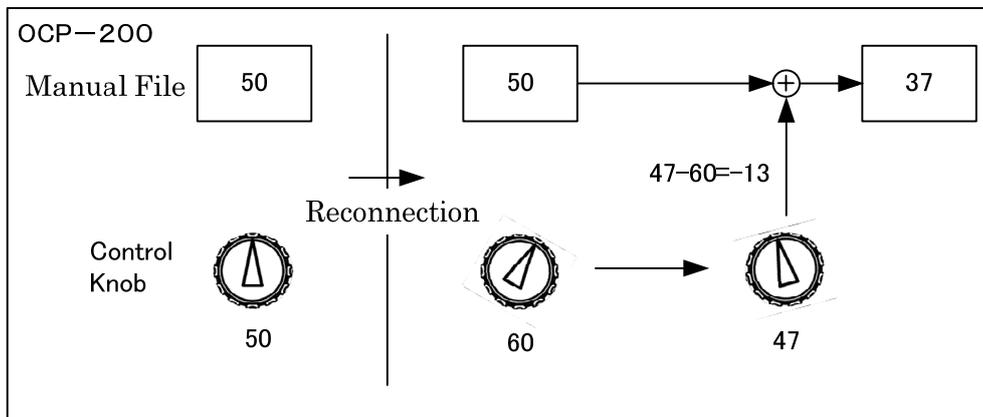
(See separate volume of “Iris Control Operation Procedure” for the detail)

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. (See "5.4 Knob Free Function" for detail operation.)

(See separate volume of "Iris Control Operation Procedure" for the detail.)

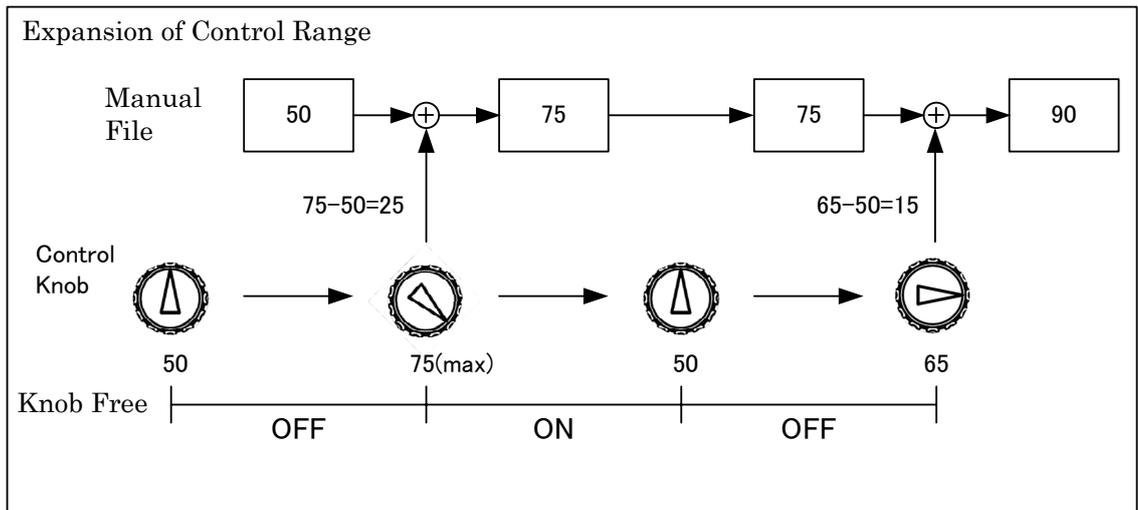
5.4 Knob Free Function

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.

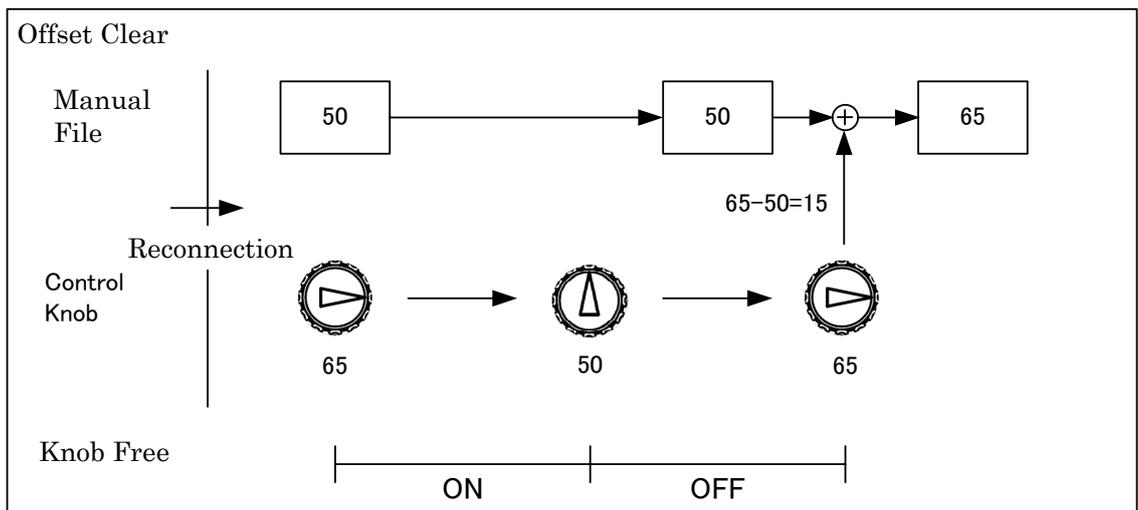
1) Control Logic

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.



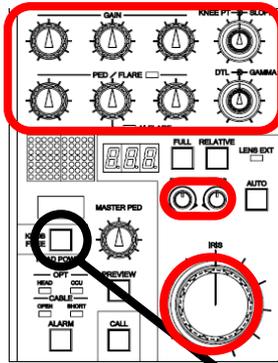
If Reconnection is done at Power ON or Panel Enable set from OFF to ON, control range of Knob may be offset depending of Knob position. After reconnection, the Knob offset can be cleared by pushing KNOB FREE Switch and rotating Knob to the center position.



5-6 5. CONTROL KNOB OPERATION

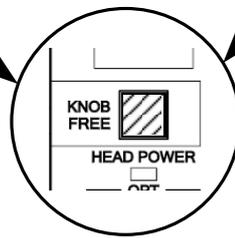
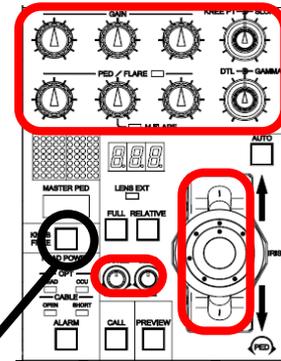
2) Knob Free Control Item

VR TYPE



Item that knob free function works

JOYSTICK TYPE



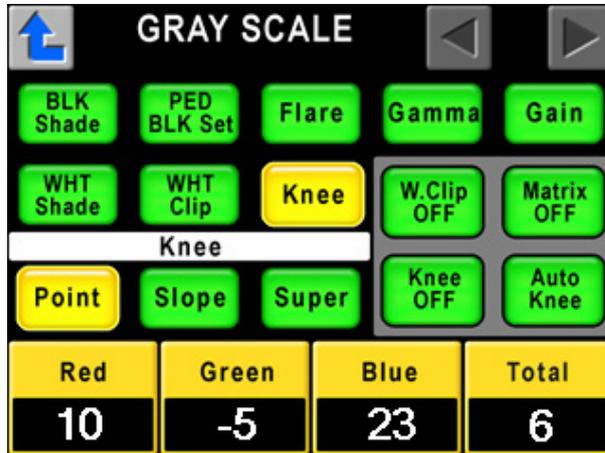
The following items are controllable with Knob Free Function.

- 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)

6. MANUAL SET/ MANUAL CLR

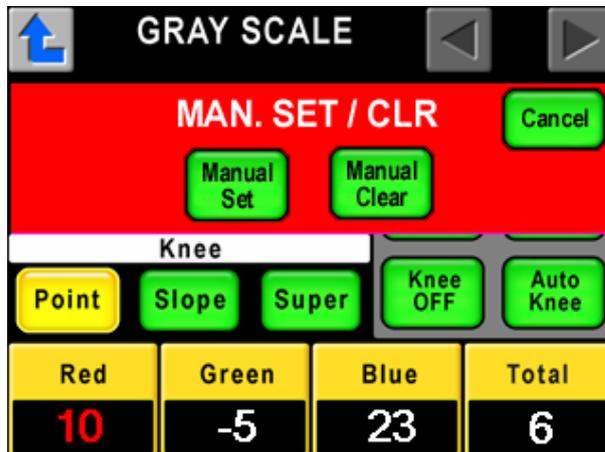
6.1 Manual Set/Manual Clear by LCD screen

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).



Click the values on the corresponding items (parameters) of the Rotary Encoder Knob when you wish to execute MANUAL SET or MANUAL CLEAR.

MANUAL SET : Doesn't work yet.



The value is displayed in RED and MANU SET/CLR menu appears. Click twice to cancel the attempt.

Press the Manual Set switch or the Manual Clear switch to be executed. In case of the Manual Set keep pressing for a moment to be executed.

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.

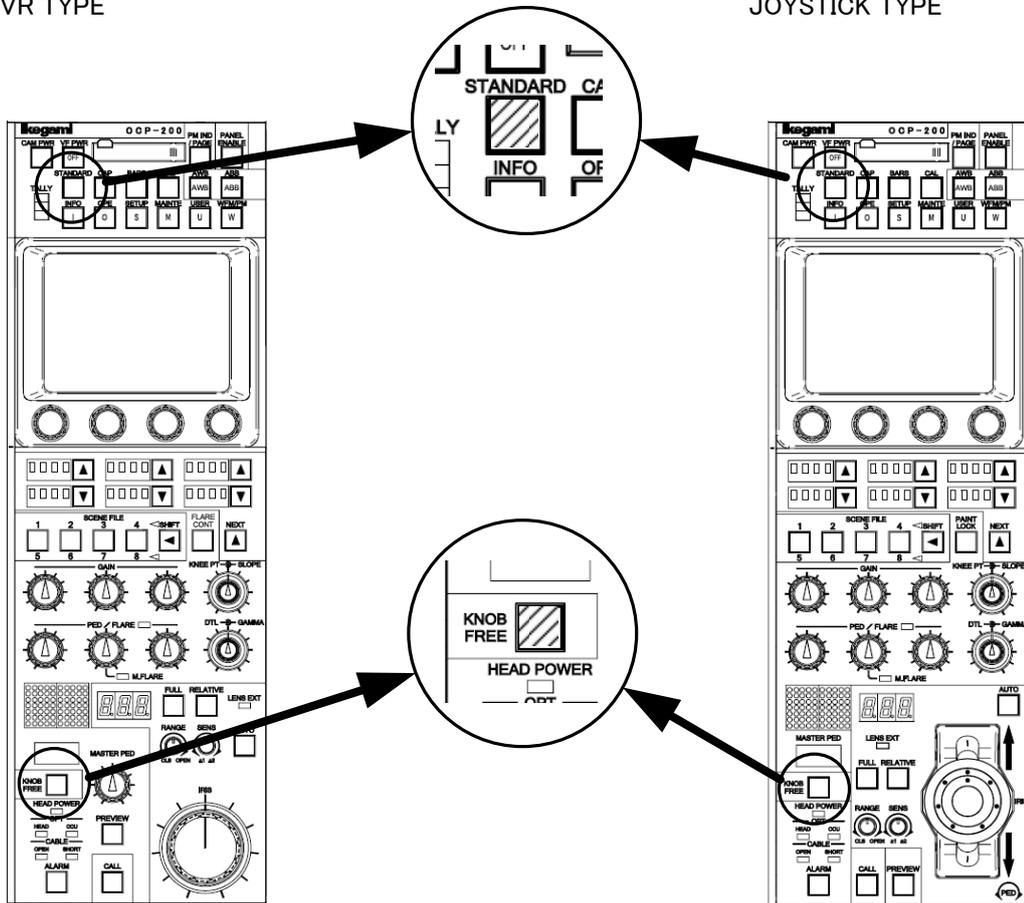
6.2 Lumped Manual Clear of Control Knob Operation

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.

VR TYPE

JOYSTICK TYPE



The following items are cleared by ALL Manual Clear Execution.

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

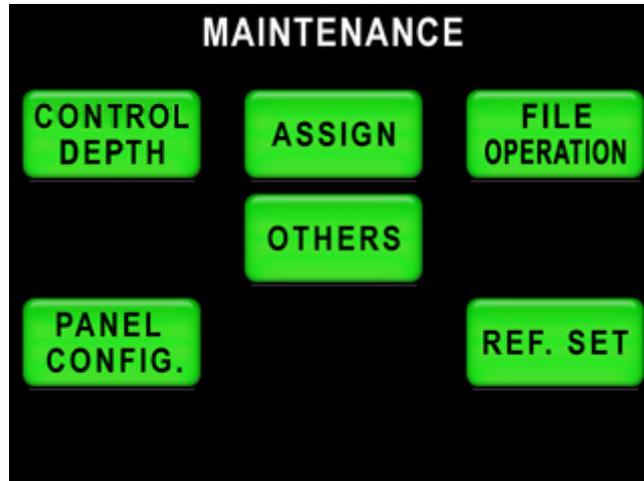
Note Not Only the values adjusted by all the Control Knobs but also the values adjusted by Rotary Encoders are released. Example; When you use the control knob and Rotary Encoder Knob for adjusting the values for the item of R.GAIN, its value is released.

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

6.3 All Manual Set / All Manual Clear

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

1. Push “MAINTE” Switch on top side of the Panel.



2. Push “FILE OPERATON” on LCD screen.



6-4 6. MANUAL SET/ MANUAL CLR

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.

7. 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.

And also, by using memory card, firmware version up of OCP-200 is also available. (See “12. FIRMWARE UPDATING” for the detail)

7.1 Type of Memory Card

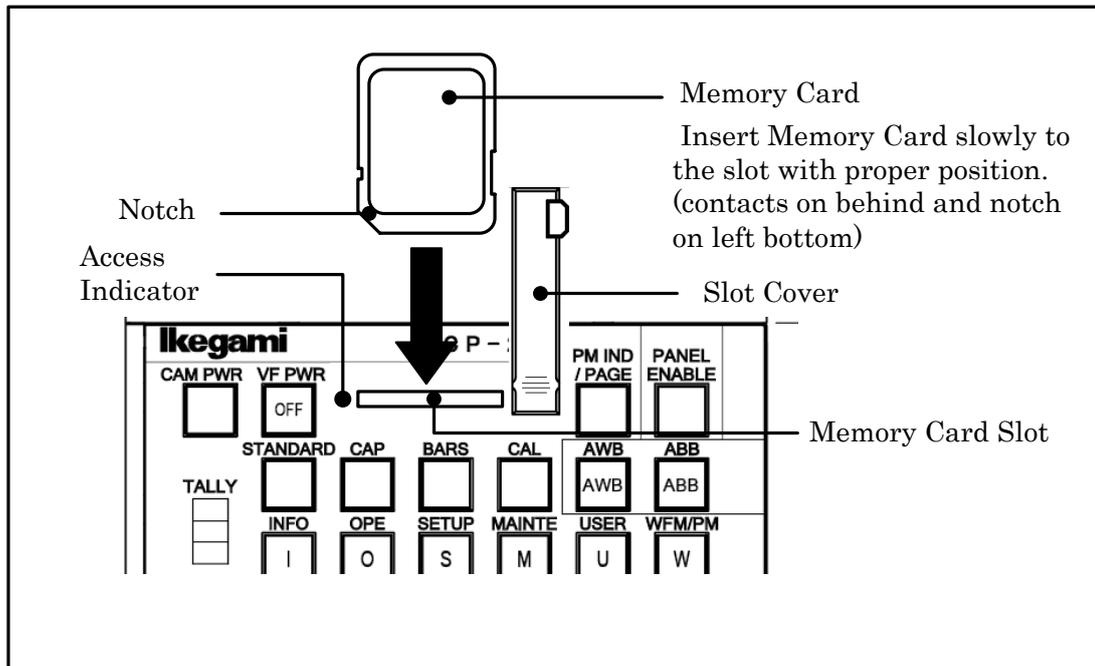
Adopting SD Memory Card of which is used for Digital Camera etc.. Capacity should be 32MB to 512MB. *Doesn't support miniSD Card with miniSD Card adaptor.

Note 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 MCP-200.

7.2 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.

To extract Memory Card, push calmly the top of the Card until hearing click sound. Pull the Card slowly after beep extract sensing buzzer. After Memory Card operation, put the slot cover for the dust proof.



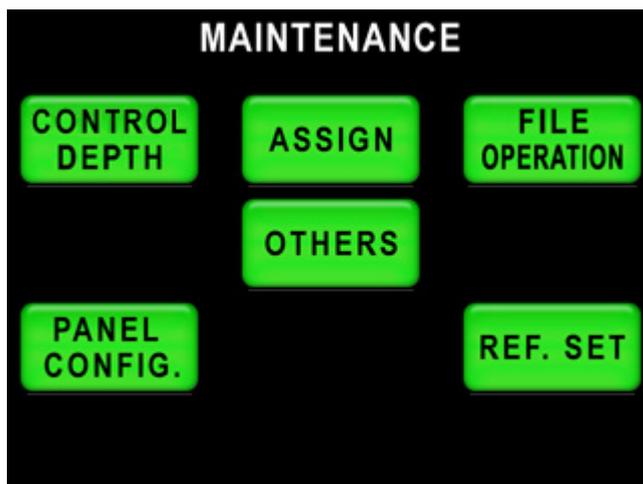
Note Do not extract Memory Card when access indicator on the slot lights or Saving/Loading data to/from Memory Card. Data or Card itself may be damaged.

Annex Pay attention. Removing sensor buzzer will not beep BUZZER, if it is set "OFF".

7.3 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 MAINTENANCE Switch in Function Switches on top side of LCD. Push FILE OPERATION Switch on LCD menu.



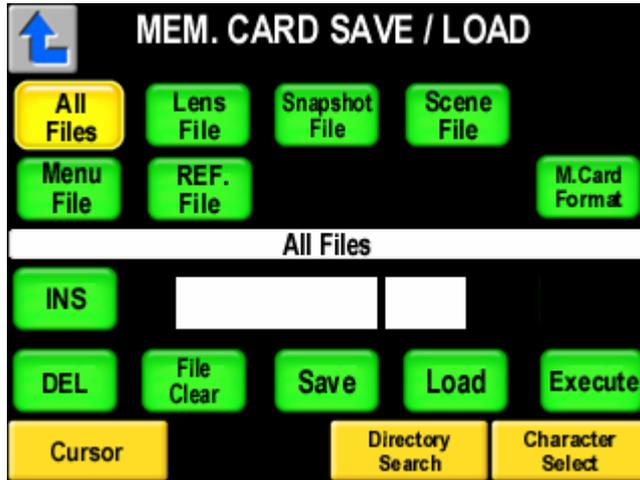
3. Push MEM.CARD SAVE/LOAD on LCD Menu.



7-4 7. MEMORY CARD OPERATION

4. Push M.Card Format Switch a couple of seconds.

LCD Display will change to Card Name Input Screen as following and cursor will come up to input.



5. Input Card Name.

Refer “7.4 Memory Card Name / File Name Operation” for input procedure of Card Name.

6. Push Execute switch and message widow will come up.
7. Push Yes switch to start formatting. Buzzer will beep after format completing. Push No switch to cancel formatting.

< Change of Card Name >

Not available to change only Card Name yet.

In case of Card Name change, re-format of SD Card is required.

7.4 Memory Card Name / File Name Operation

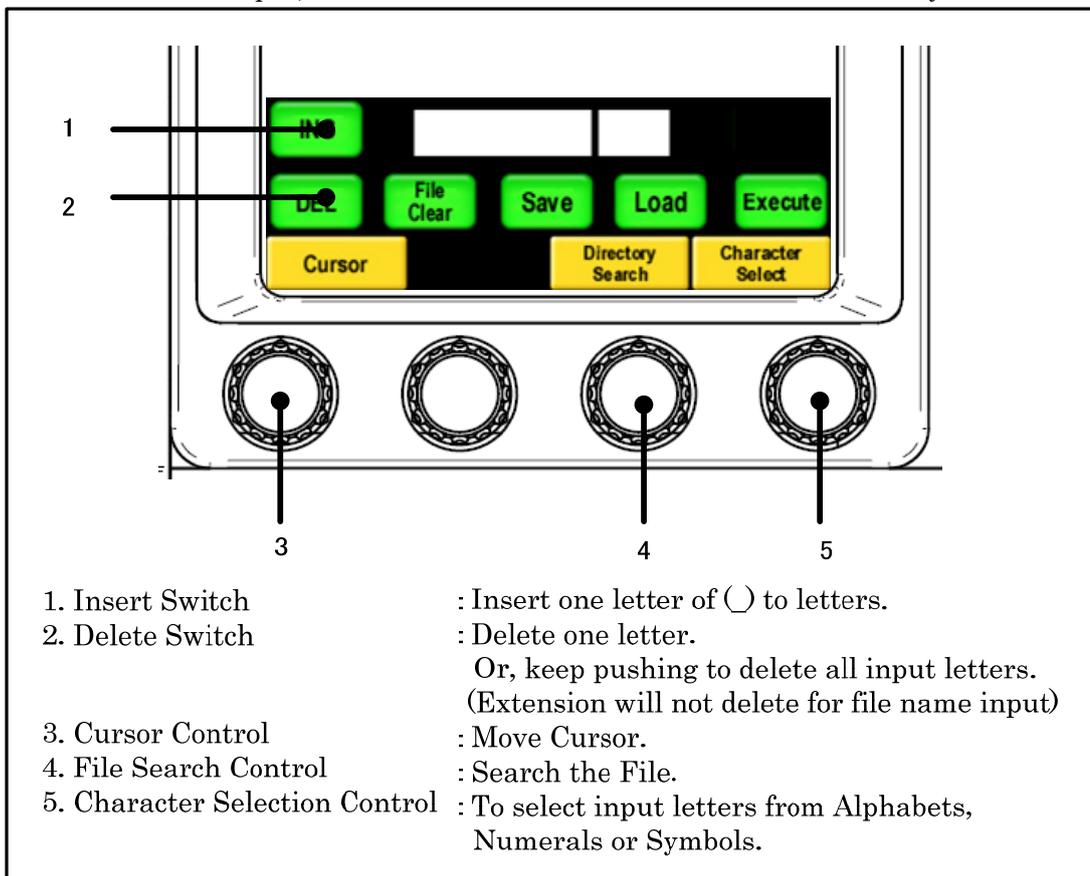
Naming to Memory Card or Files is available.

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.



7.5 File Data Save to Memory Card

1. Insert Memory Card to the slot.
2. Push MAINTEN 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.
 - In case of Reference Level File, push REF. File switch.

File Name:
Named automatically,
if file name is not input.

Extension:
Can input as you like. If no extension
input, named automatically as per type
of files, "ALL"(ALL FILE), "LNS"(LENS
FILE), "SNP"(SNAP SHOT,
"SCN"(SCENE), "REF"(REF LEVEL).

Cursor

4. Input File Name by using switches on LCD and Rotary Encoder Knob.
5. Turn Save switch to "ON".
6. Push Execute switch.
Execute switch lights and File Date will be saved, Buzzer will beep at the completing.

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



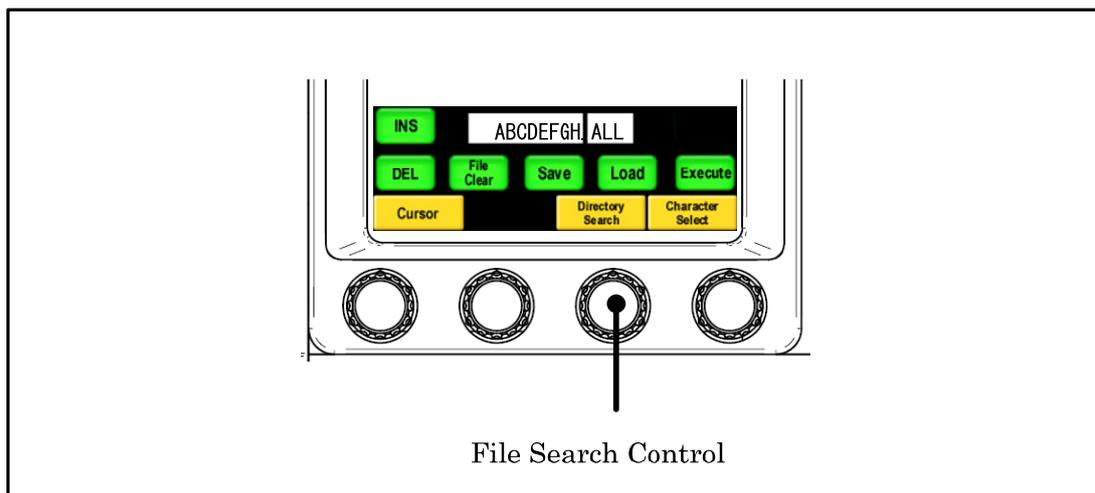
7.6 File Data Loading from Memory Card

1. Insert Memory Card to the slot
2. Push MAINT Switch in Function Switches on top of the panel. And push MAINT 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.
 - In case of Reference Level File, push REF. File switch.
4. 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.

Annex 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.



Annex 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.

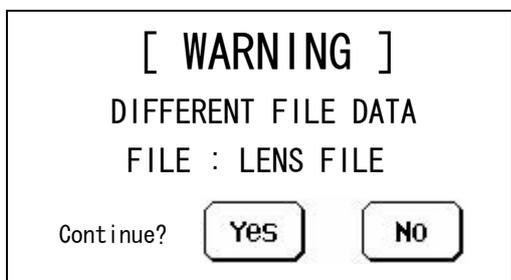


5. Turn Load switch to "ON".

6. Push Execute switch.

Execute switch lights and File Data loading starts. Buzzer will beep at the competing.

Annex 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.

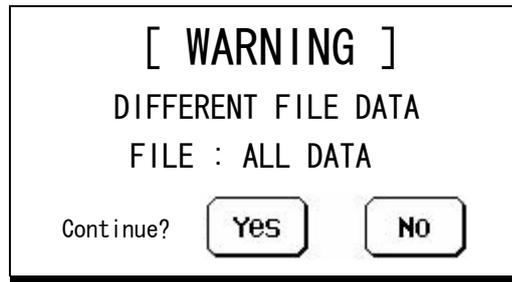


If "YES" is pushed, below warning will come up. It is unable to read out in this case. Push "OK" to cancel.



7-10 7. MEMORY CARD OPERATION

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.



7.7 Delete of File Data from Memory Card

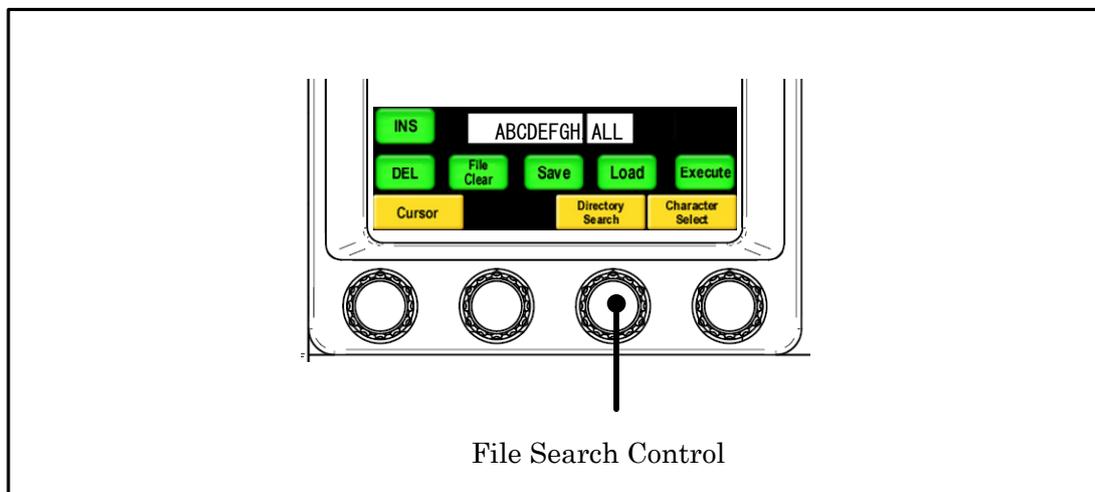
Delete of Data File from Memory Card is done with following procedure.

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.



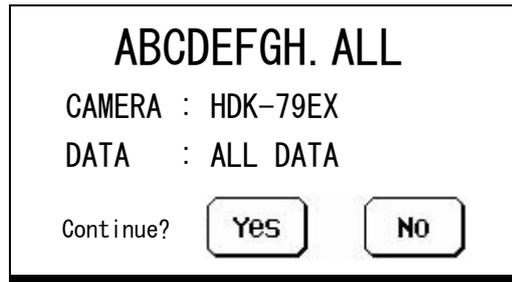
3. Select each of switches to be deleted.
 - In case of all Data File, push ALL Files switch.
 - In case of Lens File, push Lens File Switch.
 - In case of Snap Shot File, push Snapshot File switch.
 - In case of Scene File, push Scene File switch.
 - In case of Menu File, push Menu File switch.
 - In case of Reference Level File, push REF. File switch.
4. 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.



5. Turn FileClear Switch to "ON".

7-12 7. MEMORY CARD OPERATION

6. Push Execute switch.



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

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

7.8 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
<p>[WARNING]</p> <div style="border: 1px solid black; padding: 10px; text-align: center;"> <p>[WARNING]</p> <p>FILE ALREADY EXIST</p> <p>Continue? <input type="button" value="Yes"/> <input type="button" value="No"/></p> </div>	<p>Same File Name is already existed in the Memory Card. Push "YES" switch to overwrite.</p>
<p>[WARNING]</p> <div style="border: 1px solid black; padding: 10px; text-align: center;"> <p>[WARNING]</p> <p>DIFFERENT CAMERA CODE</p> <p>CAMERA : (HDK-79EX)</p> <p>Continue? <input type="button" value="Yes"/> <input type="button" value="No"/></p> </div>	<p>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.</p>
<p>[WARNING]</p> <div style="border: 1px solid black; padding: 10px; text-align: center;"> <p>[WARNING]</p> <p>DIFFERENT FILE DATA</p> <p>CAMERA : (LENS DATA)</p> <p>Continue? <input type="button" value="Yes"/> <input type="button" value="No"/></p> </div>	<p>At the data read out, this message will come up when the different type of data is selected.</p>

Message	Description
<p>[ERROR]</p> <div style="border: 1px solid black; padding: 10px; text-align: center;"> <p>[ERROR]</p> <p>! NO DATA LOAD</p> <p>OK</p> </div>	<p>Data read out is unable because File Type of Data is different.</p>
<p>[ERROR]</p> <div style="border: 1px solid black; padding: 10px; text-align: center;"> <p>[ERROR]</p> <p>! FILE NOT FOUND</p> <p>OK</p> </div>	<p>No file is existed in Memory Card when File data is read out.</p>
<p>[ERROR]</p> <div style="border: 1px solid black; padding: 10px; text-align: center;"> <p>[ERROR]</p> <p>! FILE SYSTEM ERROR</p> <p>OK</p> </div>	<p>Any system error happens in Memory Card system.</p>
<p>[ERROR]</p> <div style="border: 1px solid black; padding: 10px; text-align: center;"> <p>[ERROR]</p> <p>! DIFFERENT TYPE DATA</p> <p>OK</p> </div>	<p>Type of File Data is different.</p>

Message	Description
<p>[ERROR]</p> <div style="border: 1px solid black; padding: 10px; text-align: center;"> <p>[ERROR]</p> <p>! DATA NOT FOUND</p> <p>OK</p> </div>	<p>No proper data is not existed at the data read our.</p>
<p>[ERROR]</p> <div style="border: 1px solid black; padding: 10px; text-align: center;"> <p>[ERROR]</p> <p>! FILE BROKEN</p> <p>OK</p> </div>	<p>Data File is broken at the data read out.</p>
<p>[ERROR]</p> <div style="border: 1px solid black; padding: 10px; text-align: center;"> <p>[ERROR]</p> <p>! FILE CANNOT CREATE</p> <p>OK</p> </div>	<p>File data can not be created at the data saving.</p>
<p>[ERROR]</p> <div style="border: 1px solid black; padding: 10px; text-align: center;"> <p>[ERROR]</p> <p>! FILE NAME ERROR</p> <p>OK</p> </div>	<p>File Name of data can not be supported.</p>

Message	Description
<p>[ERROR]</p> <div style="border: 1px solid black; padding: 10px; text-align: center;"> <p>[ERROR]</p> <p>! SYSTEM ERROR</p> <p>*****</p> <p>OK</p> </div>	<p>Any problem happed in file data processing of the Camera System.</p> <ul style="list-style-type: none"> · "COMMAND TROUBLE" : Any problem in communication processing path. · "CAMERA DATA NOT FOUND" : Needed data is not existed in Camera Head at the data save. · "FILE CLEAR" : Existing File Data is deleted by any failure at File Data overwriting at the data save.
<div style="border: 1px solid black; padding: 10px; text-align: center;"> <p>[ERROR]</p> <p>! WRITE PROTECT</p> <p>OK</p> </div>	<p>Write Protect Sticker is attached on Memory Card at Data Save/Delete.</p>
<div style="border: 1px solid black; padding: 10px; text-align: center;"> <p>[ERROR]</p> <p>! CAMERA HEAD POWER OFF</p> <p>OK</p> </div>	<p>Camera Head Power OFF at Data Save/Load..</p>
<div style="border: 1px solid black; padding: 10px; text-align: center;"> <p>[ERROR]</p> <p>! SCENE FILE ON</p> <p>Turn it OFF</p> <p>OK</p> </div>	<p>Scene File is ON at Data Save/Load. Turn Scene File OFF before Data Save/Load.</p>

8. CONTROL DEPTH SETTING

8.1 Outline

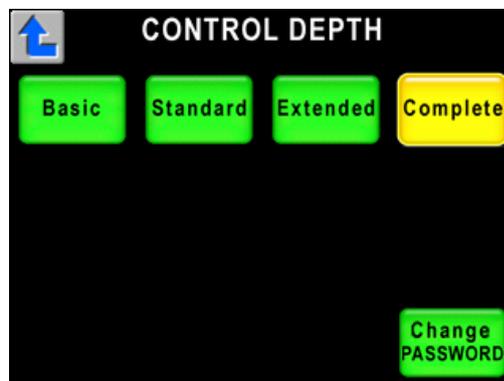
Control Depth of OCP-200 can be set for below four levels.

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.

8.2 Setting procedure of CONTROL DEPTH

Turn MAINTE Switch ON to call MAINTENANCE Screen. By pressing CONTROL DEPTH Switch, below screen will come up.

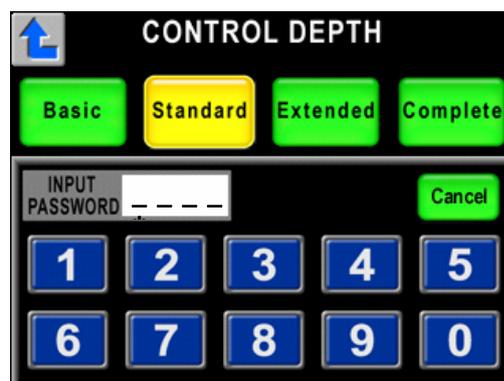


Default setting is selected for COMPLETE and full function can be operated.

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.



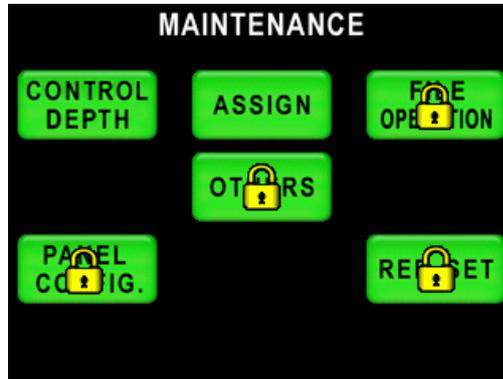
Input password of four numerals, each of Control Depth can be selected if the input password is correct. In case of incorrect password, the input field will be cleared. To clear password input page, push Cancel Switch to back to previous operating page without Control Depth change.

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

8-2 8. CONTROL DEPTH SETTING

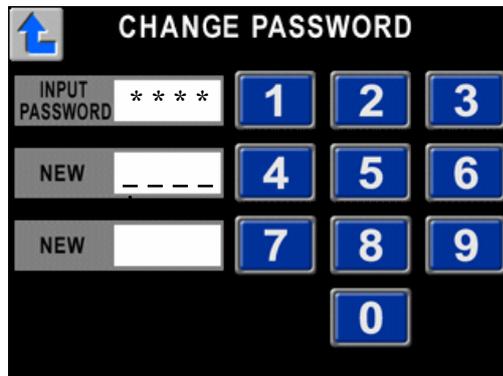
When above password input page is displayed, switches and icons for LCD page change are disabled.

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



8.3 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.

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. (See "13.3 Initial Factory Setting" for detail operation procedure.)

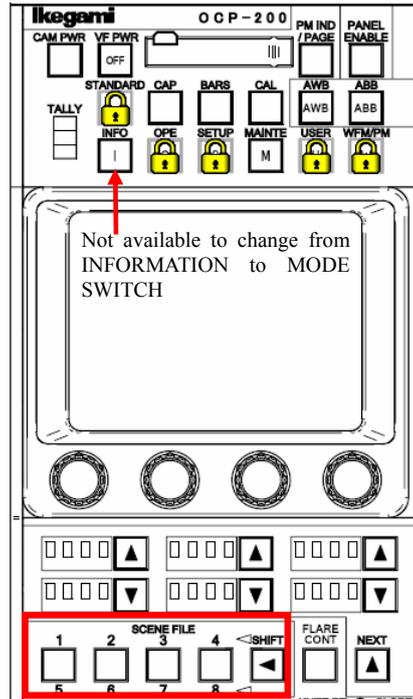
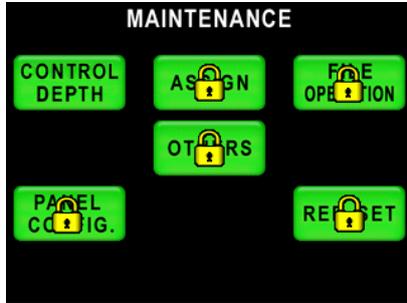
8.4 The details of CONTROL DEPTH

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
	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
STANDARD SET	FACTORY	N/A	N/A	OK	OK
	USER	N/A	OK	OK	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 Not available to change to MODE SWITCH.

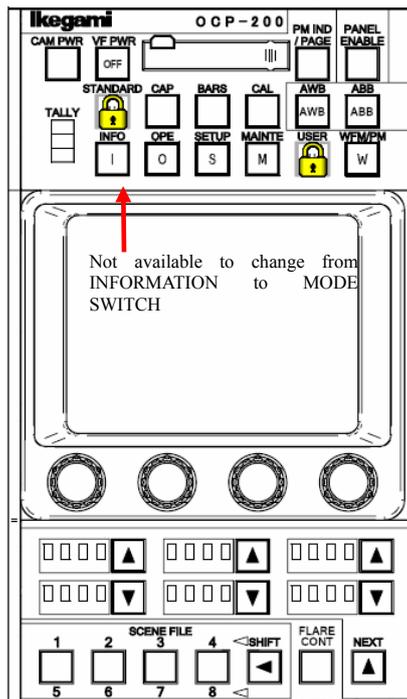
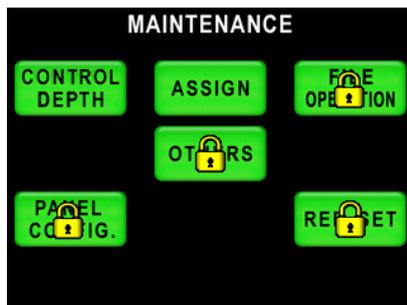
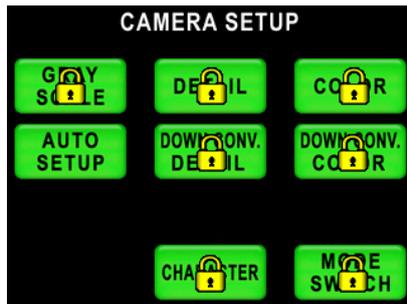
8-4 8. CONTROL DEPTH SETTING

① Basic

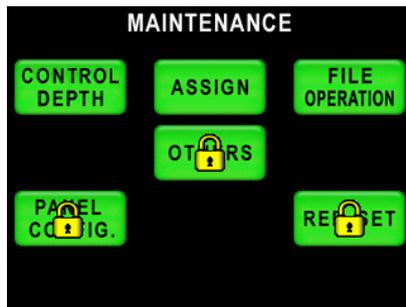
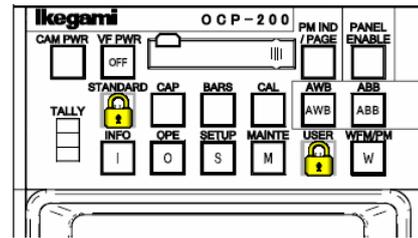
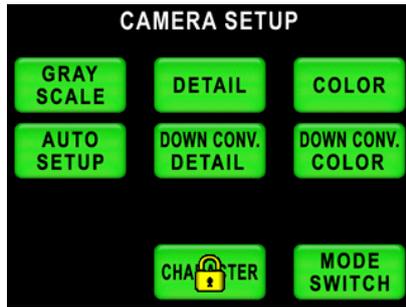


* Can not store SCENE FILE.

② Standard



③ Extended



④ Complete

No restriction.

Note Some under-developing functions are included in Complete Control Item. Specification may be changed occasionally.

9. STANDARD FUNCTION

9.1 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**

To back to standard setting related to video and color level setting.

- **Complete**

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.

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

2) Recall Preset File

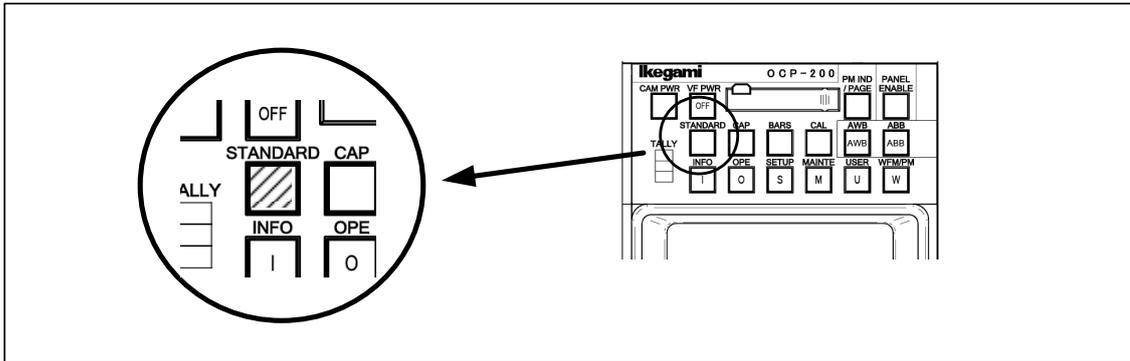
”Recall Preset File” function sends new exclusive command from Control Panel to recall Preset File previously stored in back-up memory.

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.

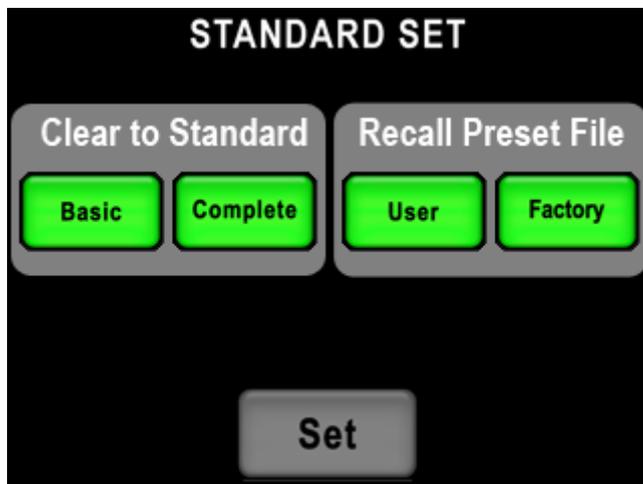
Note This function is available for the Camera Head and BS/CCU which has capability to the exclusive command. See Operation Manual of Camera Head or BS/CCU for storing procedure to User Data to Camera Head and BS/CCU. Meantime, because Factory Data is the default setting, it can not be overwritten by the user operation.

9.2 Operating Procedure

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

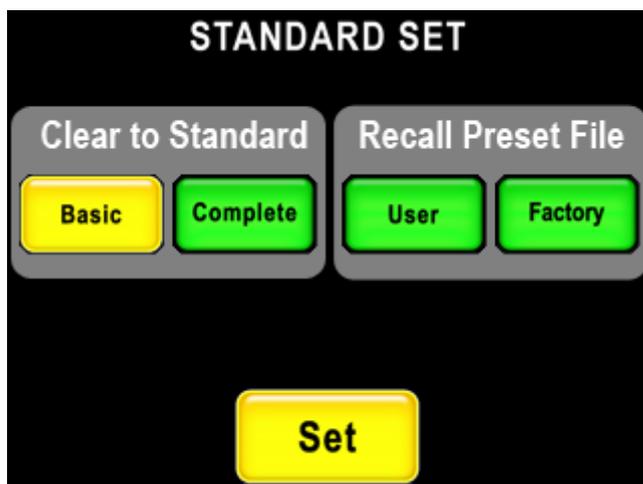


Below menu page comes up, and either Clear to Standard function or Recall Preset File function can be selectable.

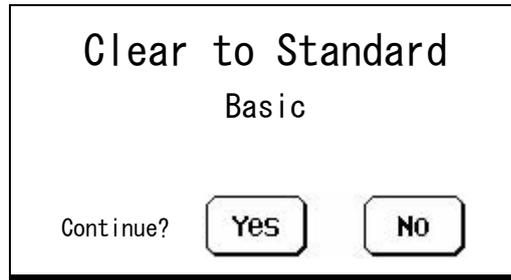


1) Clear to Standard

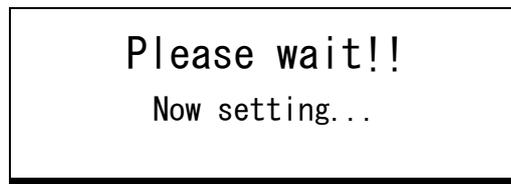
Either Basic mode or Complete mode is selectable in Clear to Standard function.



“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.

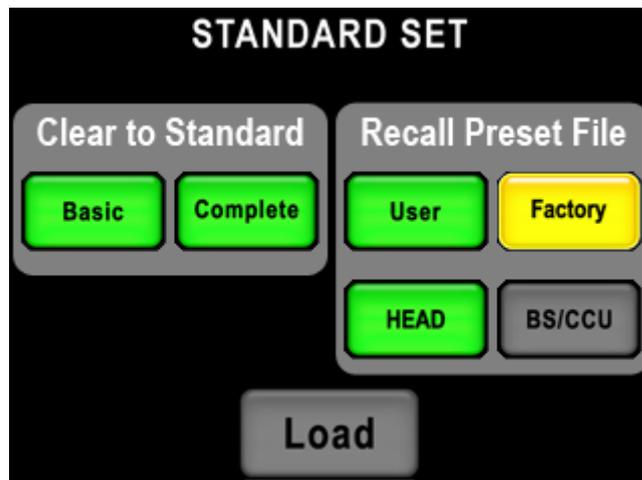


Pop-up window comes up until the execution completed to show processing going on.

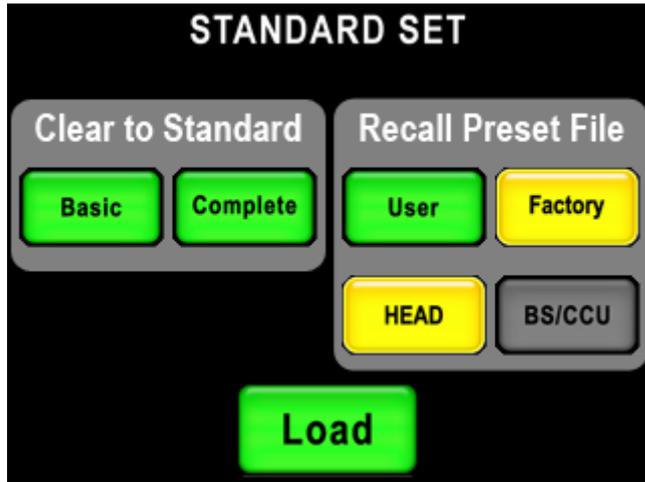
Note It will take around 5 seconds for the processing because of sending each commands sequentially. If any control is done by another Control Panel connected in parallel on the processing, Standard Function may not work correctly.

2) Recall Preset File

Either User mode or Factory mode are selectable in Recall Preset File function.



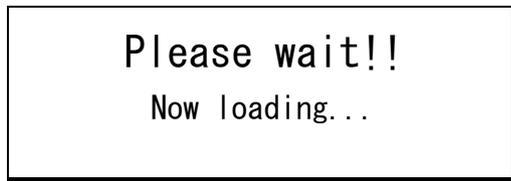
Select the mode to come up HEAD and BS/CCU switch on the bottom, target of Preset File loading(Camera Head or BS/CCU) can be selected and controlled separately. If the Camera Head and/or BS/CCU don't have Preset File function, Head Switch and/or BS/CCU switch indicate Gray and it shows that it is unable to be selected.



“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.



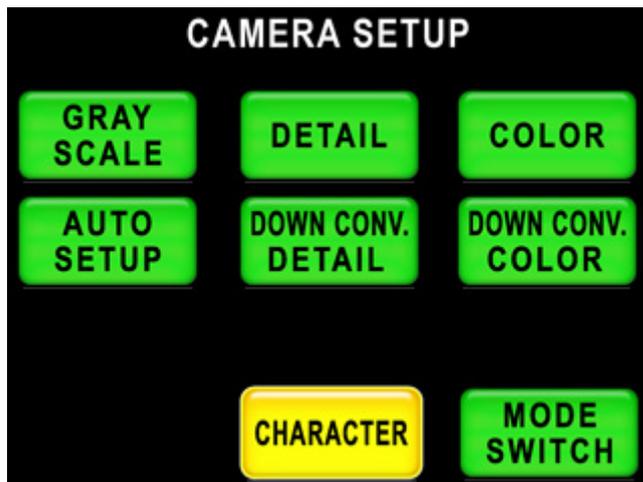
If error occurs in Preset File Loading, Pop-up window will come up for attention. Press "OK" to confirm to continue the execution.



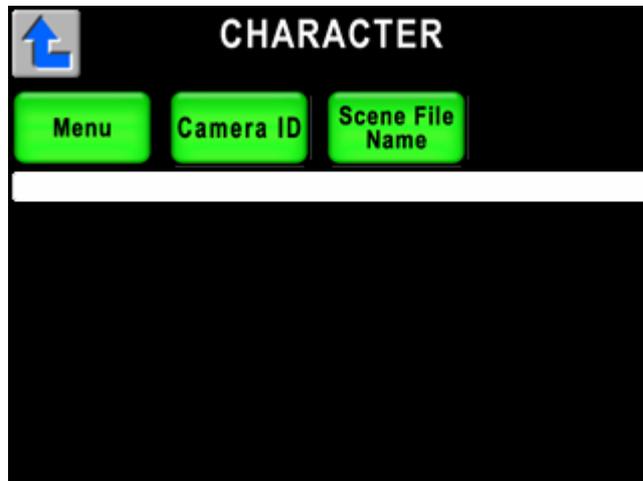
Note After Preset File loading, Camera Head and/or BS/CCU may be reset automatically for initialize. In that processing, OCP may be Panel Enable off or LCD screen off, but OCP is NOT in trouble. This is correct reaction because of unlocked command.

10. CHARACTER SETUP

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



By pressing "CHARCTER" Switch,



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

...can be setup.

10.1 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.

HDTV CONT (1/2)	
QUIT	
OUT FORMAT	1080 I59.
2-3 PULL DOWN	TYPE A
VAR FRAME	60
SYNC CONT	OFF
HD OUT H PHASE	0
HD OUT V PHASE	0
SD OUT V PHASE	0

3. Rotate Select Knob or Next Knob to set blinking cursor to setting target and push Enter switch. Blinking cursor 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;

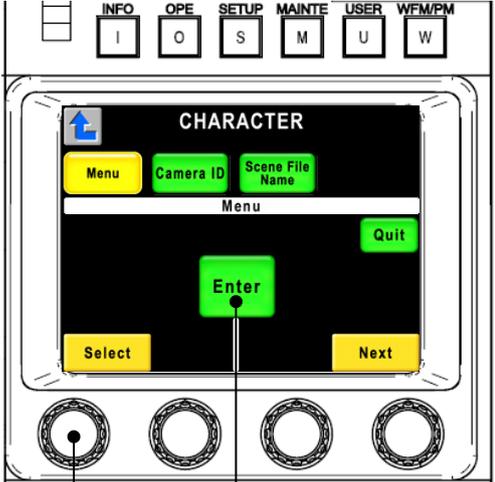
- Select and enter QUIT on PM screen by Menu control.
- Push Quit switch on LCD
- Push one of Function Switch on the top side of panel.

10.2 BARS TITLE Entry

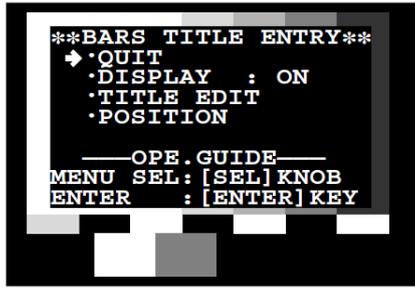
As per procedure of “10.1 Camera Menu Setup”, select “BARS TITLE” in Camera Menu.

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

OCP-200

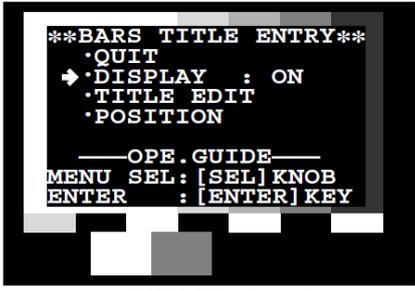


1. Select BARS TITLE from Main Menu to indicate BARS TITLE entry page on PM.



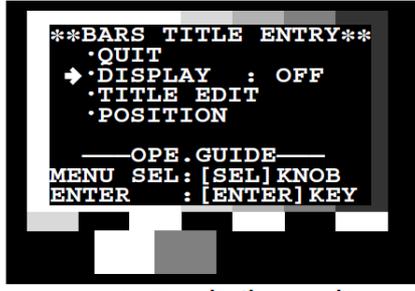
BARS TITLE ENTRY display

2. Rotate Select Knob to select "DISPLAY".



DISPLAY selected

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



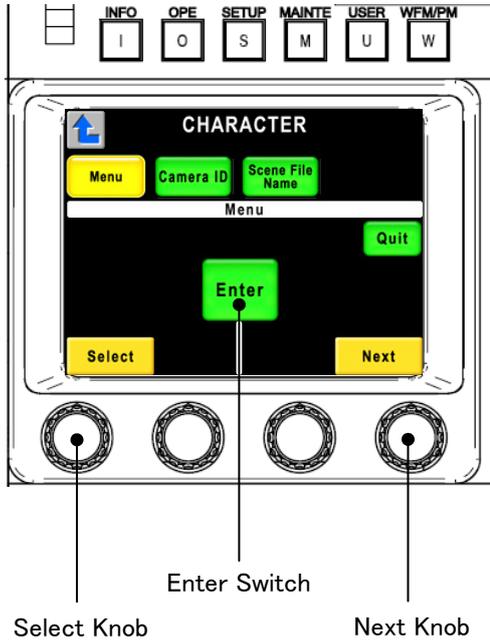
ON/OFF selecting mode

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

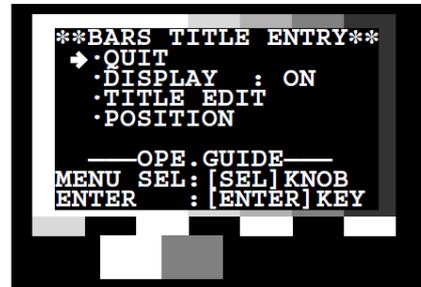
5. Press Enter Switch to leave from ON/OFF selection mode.

2) Editing of "BARS TITLE"

OCP-200

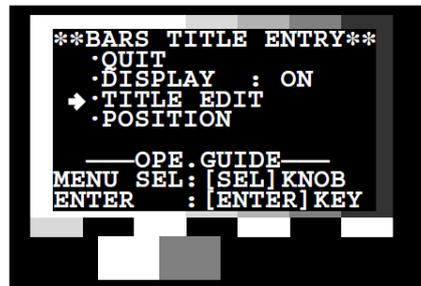


1. Select BARS TITLE from Main Menu to indicate BARS TITLE entry page on PM.



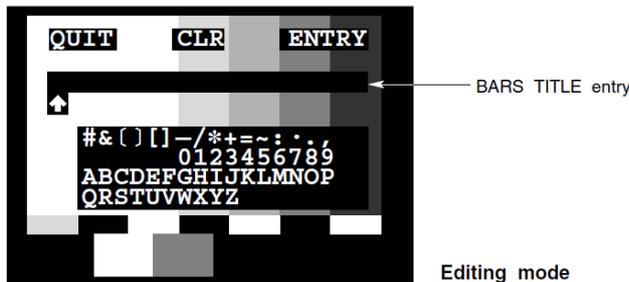
BARS TITLE ENTRY display

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;

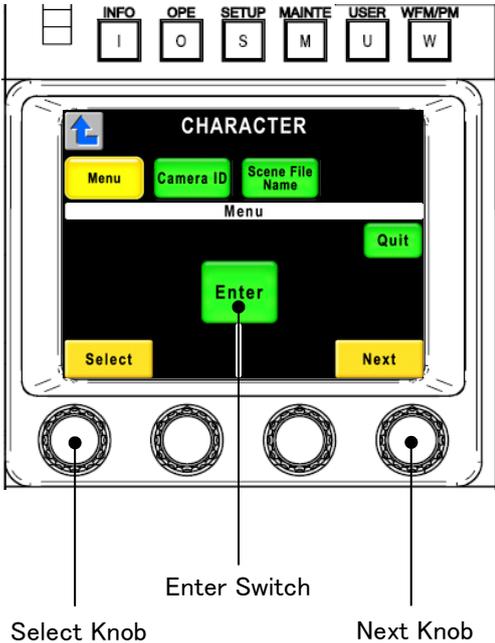
- Select Knob : Select character to be input.
- Next Knob : Set the position for character entry, or select "QUIT", "CLR", "ENTRY".
- Enter Knob : Will be activated when "QUIT", "CLR" or "ENTRY" are selected by Iris Control.

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

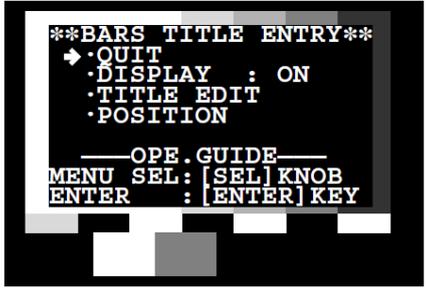
- [QUIT] : To become invalid Entered or Edited BARS TITLE, and leave from Edit mode(Previous BARS TITLE setting remains).BARS TITLE
- [CLR] : To clear all BARS TITLE.
- [ENTRY] : To save entered and edited BARS TITLE, and leave from Edit mode. BARS TITLE are updated and displayed after the entry.

3) Character Location setting of "BARS TITLE"

OCP-200

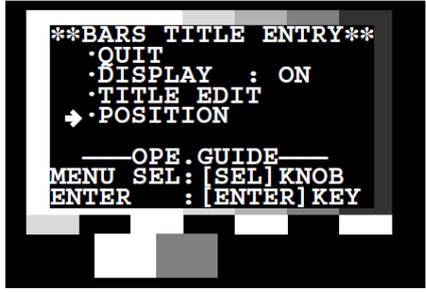


1. Select BARS TITLE from Main Menu to indicate BARS TITLE entry page on PM.



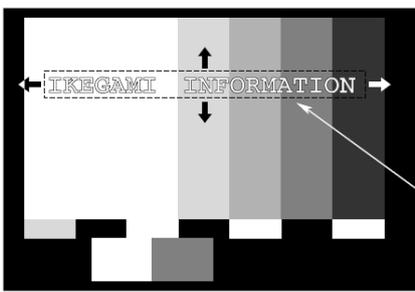
BARS TITLE ENTRY display

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.

10.3 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.

The diagram illustrates the camera control panel and its LCD screen during the Camera ID entry process. The panel features a top row of menu buttons (INFO, OPE, SETUP, MAINT, USER, WFM/PM) and a central LCD screen. The screen displays the 'CHARACTER' menu with 'Camera ID' selected. Below the screen are three rotary encoder knobs (1, 2, 3) and three switches (4, 5, 6). The LCD screen also shows a character input table and an input field containing 'IKEGAMI'. A separate inset shows the 'Camera ID Entry Page' with the same input field and character table.

Camera ID Entry Page

HDK-*** Color Camera
Camera ID Set Mode

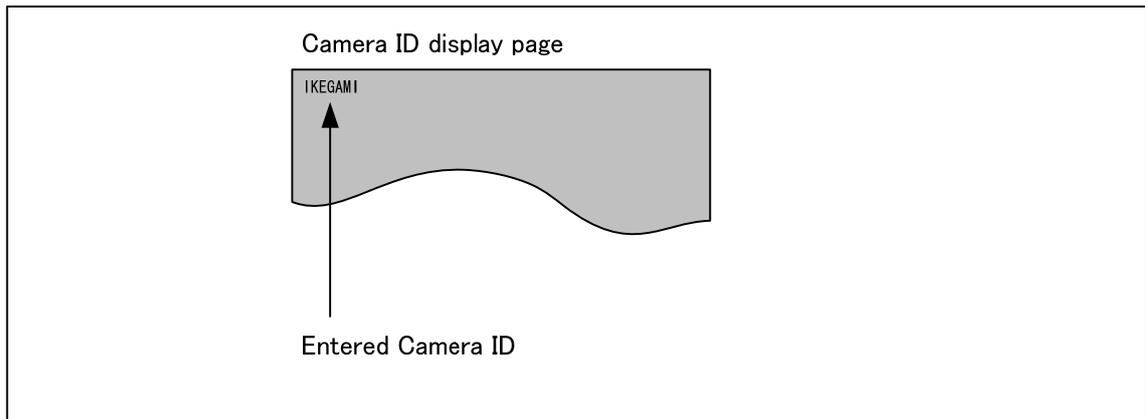
0123456789 #%&*=+*/_ . : ; ' " @ \$! ?
 ABCDEFGHIJ KLMNOPQRST UVWXYZ | < > ◊ ◊
 abcdefghij klmnopqrst vwxyz ^ ` []

IKEGAMI

Input Characters
Camera ID Entry Field

1. Cursor Left/Right Knob : To move cursor right and 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.

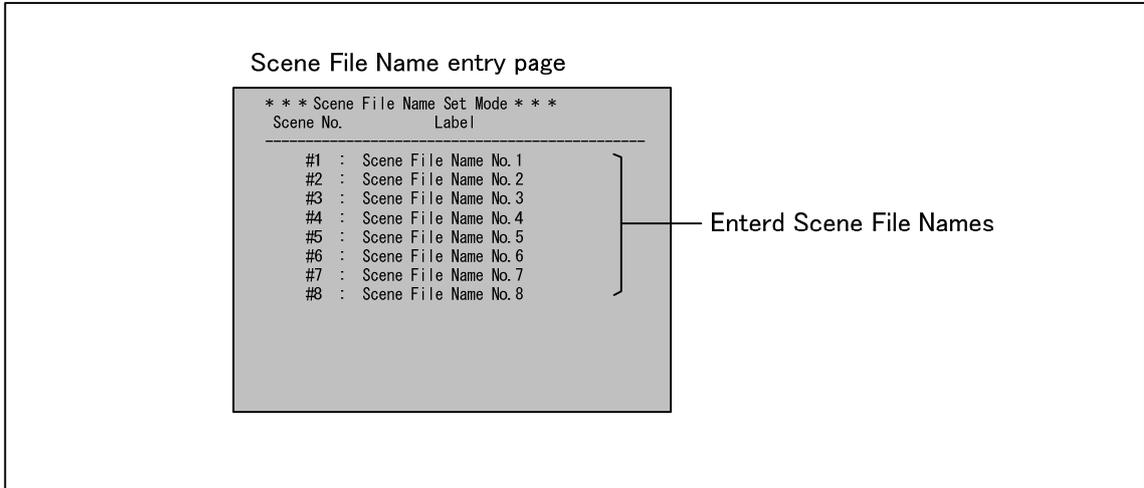


For the reentry, repeat above procedure from 1 to 4.

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.

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.
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.

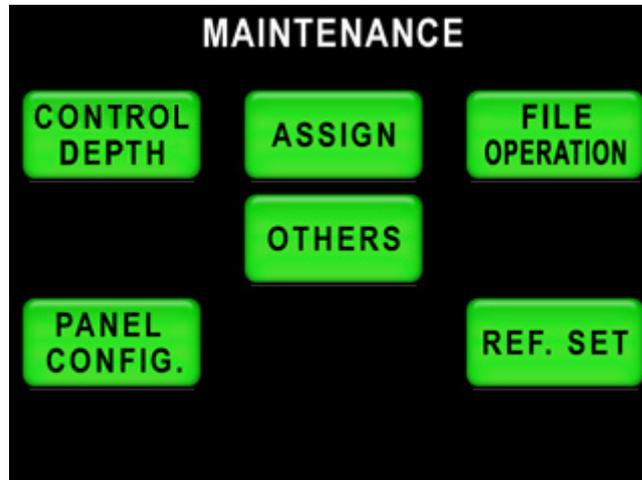
At the multiple panel operation, if Camera ID and Scene File Name are set at the same time, those setting items may become confused.

11. PANEL SET-UP(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.

11.1 Operating Procedure

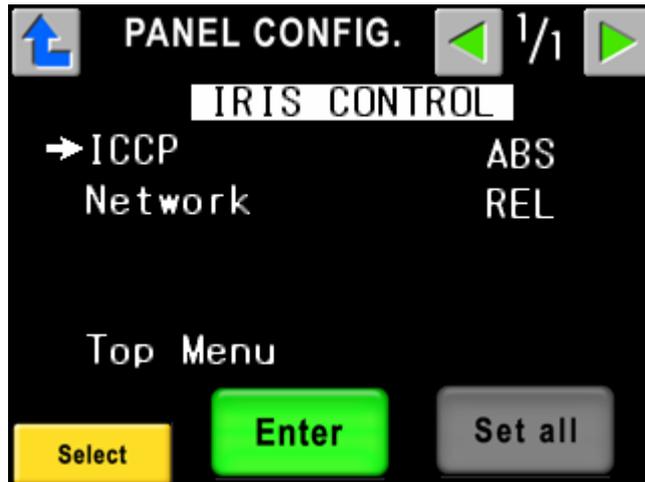
1. Press "MAINTEN" switch in Function Switches on top side of the panel.



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



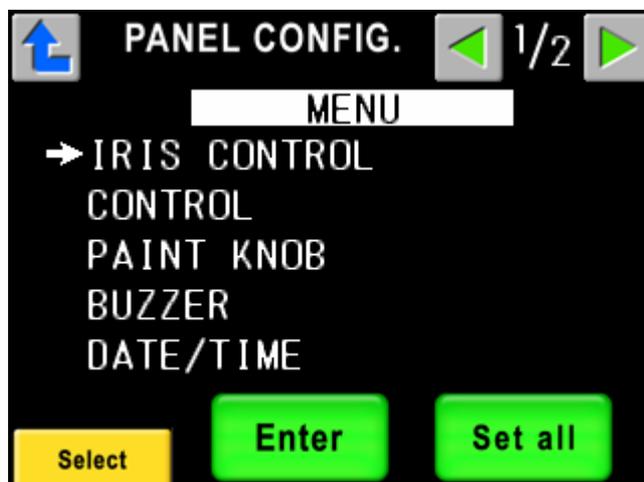
3. By rotating Rotary Encoder on left side, "→" symbol moves up and down. Set control item and push "Enter". Menu page can be changed with   switch.



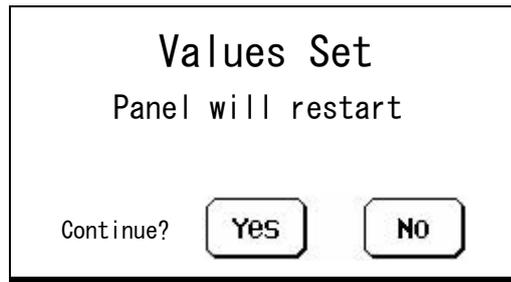
4. By rotating Rotary Encoder on left side, “→” symbol moves up and down. Set control item and push “Enter”. “Enter” changes to “Edit” and control item will blink.



5. Selecting control item by Rotary Encoder, and press “Edit” 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.

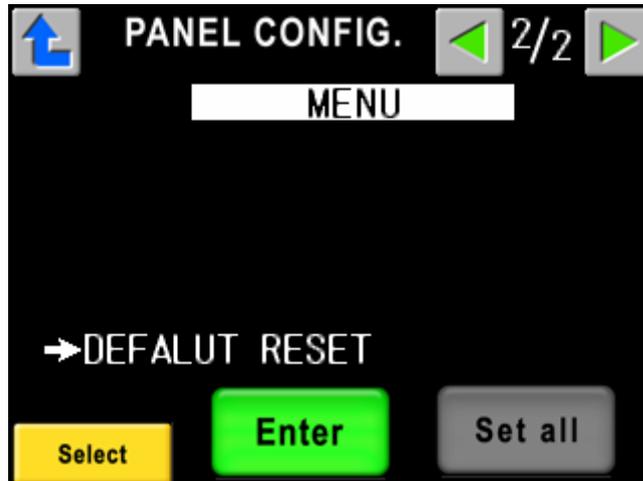


7. Pop-up window comes up on LCD screen for attention. Press “Yes” to confirm the setting from temporary entered setting. To initialize the setting, Control Panel will restart automatically. If “No” is pressed, the setting will be returned to previous setting.

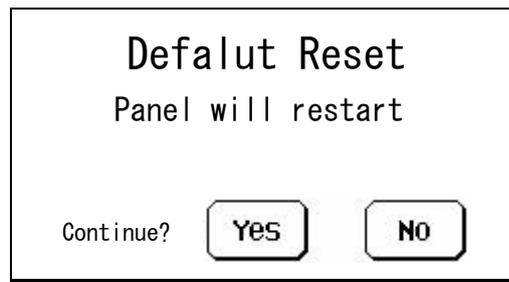
Note If it returns from Panel Config. page without pressing “Set all” switch, temporary set-up data is cleared and it returns to previous set-up. However, only DATE/TIME menu set-up is changed by pressing “Edit” switch, not by pressing “Set all”, because of its characteristics.

11.2 Initialize of Panel Config.

Setting item of Panel Config. can be initialized as following.



Select "DEFAULT RESET" and press "Enter".



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.

Note "DATE/TIME" or system related item is not included in initial setup item. See "11.3 Setup Item" to confirm initialize item. See "13.3 Initial Factory Setting" to initialize all setup item.

11.3 Set-up Item

Set-up Item

(1/3)

Menu	Item	Description	Sub-Description
IRIS CONTROL			<i>Iris Control Setup</i>
	ICCP	At Ikegami Control Command	
		ABS ※1	Absolute Value Iris Control
		REL	Relative Value Iris Control
	Network	At Network Control Command	
		REL ※1	Relative Value Iris Control
		ABS	Absolute Value Iris Control
	RANGE/SENSE	RANGE/SENSE Knob	
		ENABLE ※1	Enable
		DISABLE	Disable
CONTROL			<i>Control Set-up</i>
	Tally Guard	Tally Guard	
		OFF ※1	Off
		LIMITED	Limited Function
		ALL	Guard All
	AWB/ABB Start	AWB/ABB Start Control	
		STD ※1	Standard
		GUARD	Guard to pressing a while
	SF Name Entry	Scene File Name Automatic Entry	
		ON ※1	On
		OFF	Off
	WFM REM	Waveform Monitor Control	
		STD ※1	Standard
		PRT4	4 Preset
		PRT6	6 Preset
PAINT KNOB			<i>Paint Knob Set-up</i>
	Gain Range	Gain Knob Control Range	
		3dB ※1	±3dB
		6dB	±6dB
	Ped Range	Pedestal Knob Control Range	
		STD ※1	Standard
		FINE	Fine Tuning
	Black Knob	Black Knob	
		SELECT ※1	Selectable by Panel
		PED	Pedestal Fixed
		FLARE	Flare Fixed
	Center Flare	Center Flare Knob Control	
		AUTO ※1	Automatic Sensing of Camera Functionality
		G CH	G FLARE Fixed
MASTER		MASTER FLARE Fixed	

※1 marked Item is initialized by “11.2 Initialize of Panel Config.” and “13.3 Initial Factory setting”.

※2 marked Item is initialized by “13.3 Initial Factory Setting”

Gray Function is still under development. There is a possibility to be changed specifications.

11-6 11. PANEL SET-UP(PANEL CONFIG.)

Set-up Item

(2/3)

Menu	Item	Description	Sub-Description	
BUZZER			Buzzer Set-up	
	Click Volume	STD ※1	Standard	
		ATT	Attenuate	
		OFF	Off	
	Call Volume			Call Buzzer Volume
		STD ※1	Standard	
		ATT	Attenuate	
	Error Volume			Error Beep Volume
		STD ※1	Standard	
		ATT	Attenuate	
	DATE/TIME			Clock Set-up
		Year		Year
Month			Month	
Date			Day	
Hour			Hour	
Minte			Minute	
DISPLAY			Display Set-up	
	Control data			Control Data Display
		ABS ※1	Absolute Value Control	
		OFFSET	Offset	
	M PED Value			Master Pedestal Display
		% data ※1	Video Level Display	
		CONTROL	Control Data Display	
	Call Latch			Blinking 20 sec. after Call
		ON ※1	On	
		OFF	Off	
	Program No.			Program Number Display
ON ※1		On		
T-OFF		Off at Tally On		
	OFF	Off		

※1 marked Item is initialized by "11.2 Initialize of Panel Config." and "13.3 Initial Factory setting".

※2 marked Item is initialized by "13.3 Initial Factory Setting"

Gray Function is still under development. There is a possibility to be changed specifications.

Set-up Item

(3/3)

Menu	Item	Description	Sub-Description
SYSTEM			System Set-up
	PAU	PAU Control	
		OFF ※2	Off
		ON	On
	EXTERNAL-2	Set-up of EXTERNAL-2	
		TALLY ※2	TALLY Input/Output
WFM		WFM Output	

※1 marked Item is initialized by “11.2 Initialize of Panel Config.” and “13.3 Initial Factory setting”.

※2 marked Item is initialized by “13.3 Initial Factory Setting”

Gray Function is still under development. There is a possibility to be changed specifications.

<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	—	—	○
EFFECT 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	—	○	○

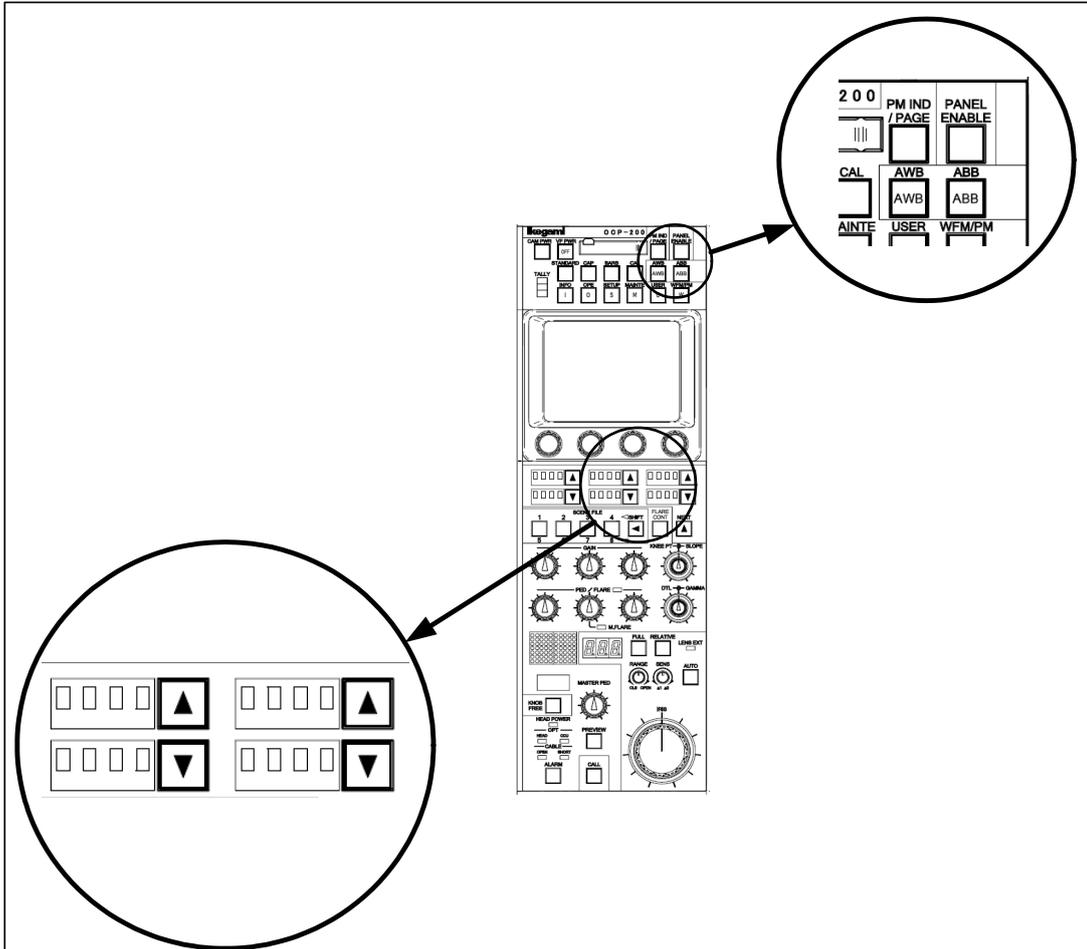
—: Tally Guard Disable

○: Tally Guard Enable

12. FIRMWARE UPDATING

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

Update Procedure



12-2 12. FIRMWARE UPDATING

1) Step 1

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

```
*** PROGRAM UPDATE ***  
  
ROM VERSION STR1234V00  
CHECK SUM: 1234  
  
COPYRIGHT (c) 2005  
IKEGAMI TUSHINKI CO . LTD
```

After several seconds, the screen below appears.

```
*** PROGRAM UPDATE ***  
  
INSERT MEMORY CARD  
FILE      :  
MODEL     :  
PROG NO   :  
CHK SUM   :
```

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?

```

12-4 12. FIRMWARE UPDATING

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 DOWN switch on the lower right of the LCD screen, and start execution of the updated firmware.

13. TROUBLE SHOOTING

13.1 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.

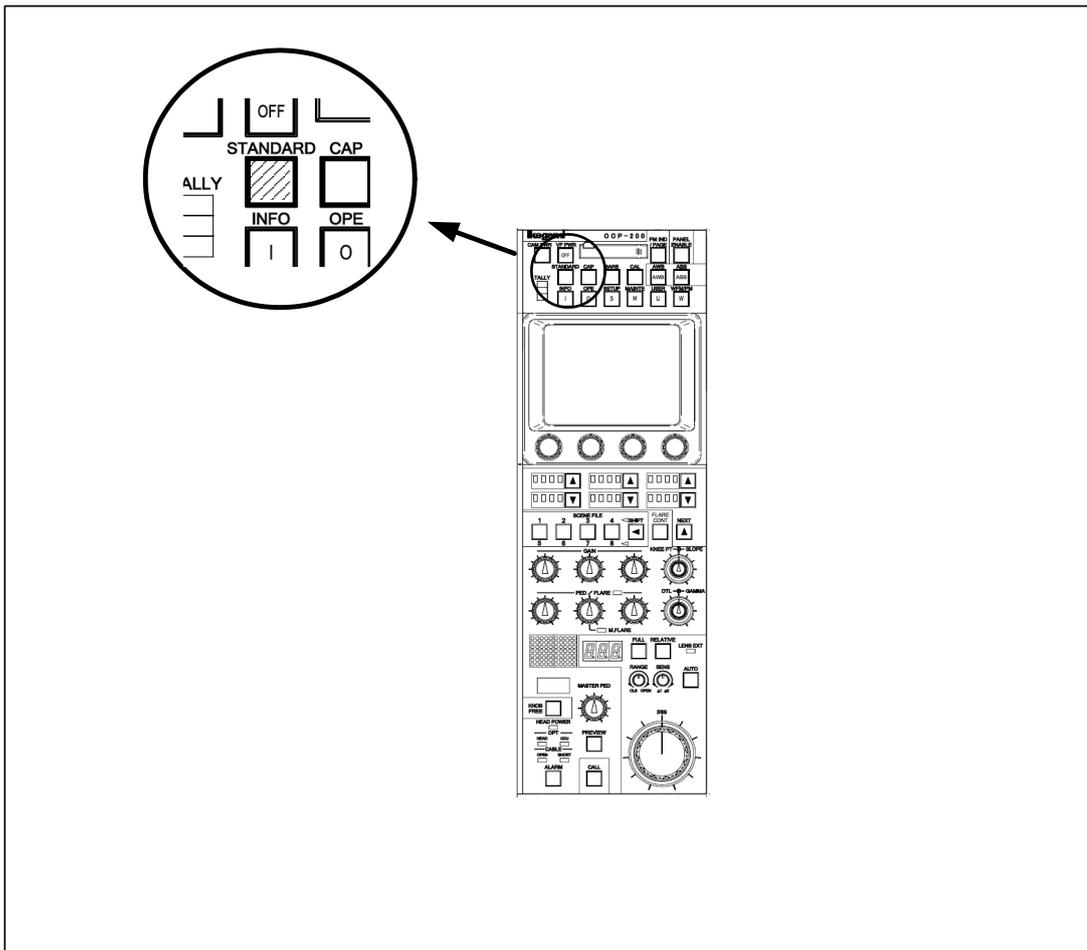
If any trouble happened in BS/CCU or Camera Head, it senses the problem to flash ALARM Indicator on OCP. And it shows where the problem has happened and display Diagnostic Information page on Picture Monitor.

If PM IND/PAGE button on OCP is pressed, Diagnostic Information page will come up on Picture Monitor to check the condition.

13.2 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.



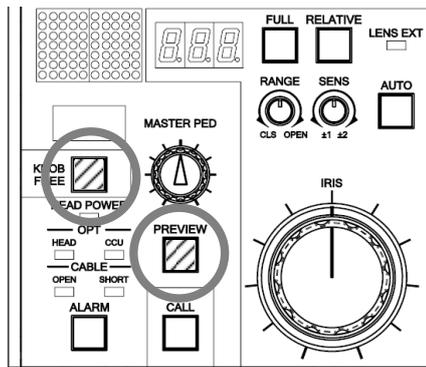
13.3 Initial Factory Setting

It is possible to clear Password or Control Panel setting to initial factory setting. In case to initialize just Panel Config. item, see “11.2 Initialize of Panel Config.”.

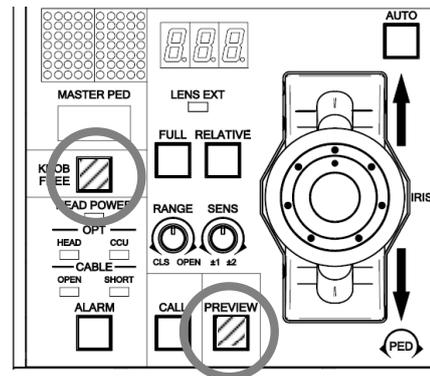
Once this procedure has been started, it must be completed. If the procedure has failed, re-try again from Procedure 1.

1) Procedure 1

VR TYPE



JOYSTICK TYPE

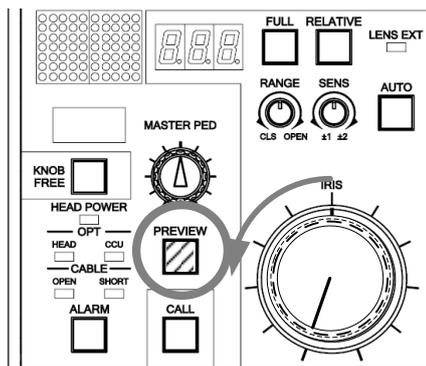


In pressing KNOB FREE Switch, and press PREVIEW Switch in a couple of seconds. PREVIEW Switch blinks and it will enter into Initial Setting Mode.

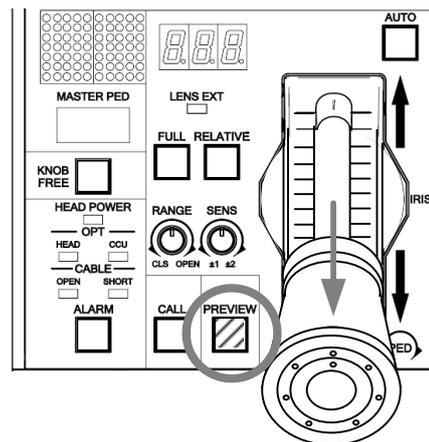
2) Procedure 2

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

VR TYPE



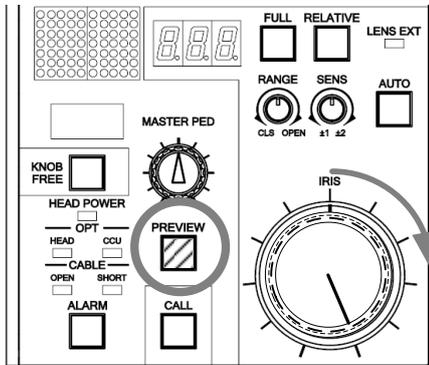
JOYSTICK TYPE



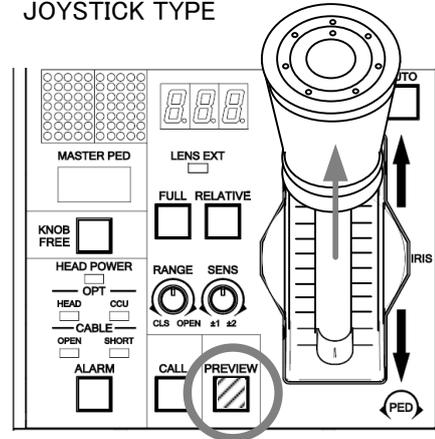
3) Procedure 3

Move Iris Knob or JOYSTICK Knob IRIS to open direction to the end. And push PREVIEW Switch. Operation is confirmed with beep sound. Then it is cleared to initial factory setting.

VR TYPE



JOYSTICK TYPE



Note 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.

13.4 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.



In this case, it is necessary to execute “13.3 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 “13.3 Initial Factory setting”.

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

14. SPECIFICATIONS

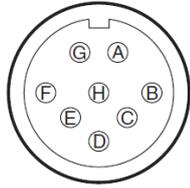
14.1 Rating/Performance

Power Requirement	DC+12V(+10 to +14V)
Power Consumption	7.2W (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

14.2 Pin Assignment for External Connector

1. COMMAND Connector

Receptacle



Insertion Side

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

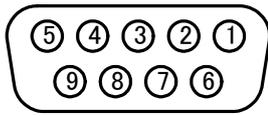
Unit Side : PRC05-R8M
 Cable Side : PRC05-199P9-8F (8pin Female Plug)
 or equivalent

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)

— Receptacle —



Unit Side : D-SUB 9 pin (Socket)

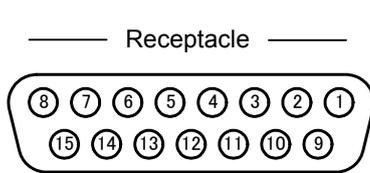
Cable Side : D-SUB 9 pin (Pin), Inch scale screw

Insertion side

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		

14-4 14. SPECIFICATIONS

3. EXT-2 (PREVIEW) Connector



Connector for System Expansion (Not used except PVW output)

Unit Side : D-SUB 15 pin (Socket)

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

Insertion side

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) Tally Input

Tally Input/Output function is available. Because In/Out multi function pin allocation, either Input or Output function can be set. Default setting is Tally Out.

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 Output

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

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	

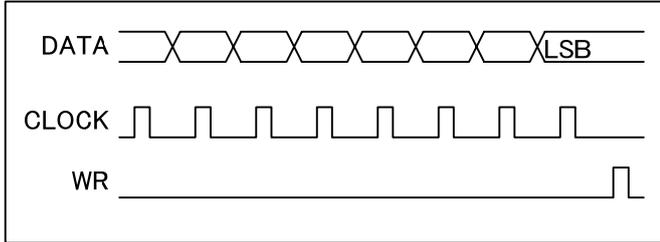
Note Input circuit is simple configuration. Then longer cable length or voltage difference may prevent correct control. In that case, external interface such as photo coupler interface box will be required and connect OCP-200 and Camera via Interface Box.

14-6 14. SPECIFICATIONS

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

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