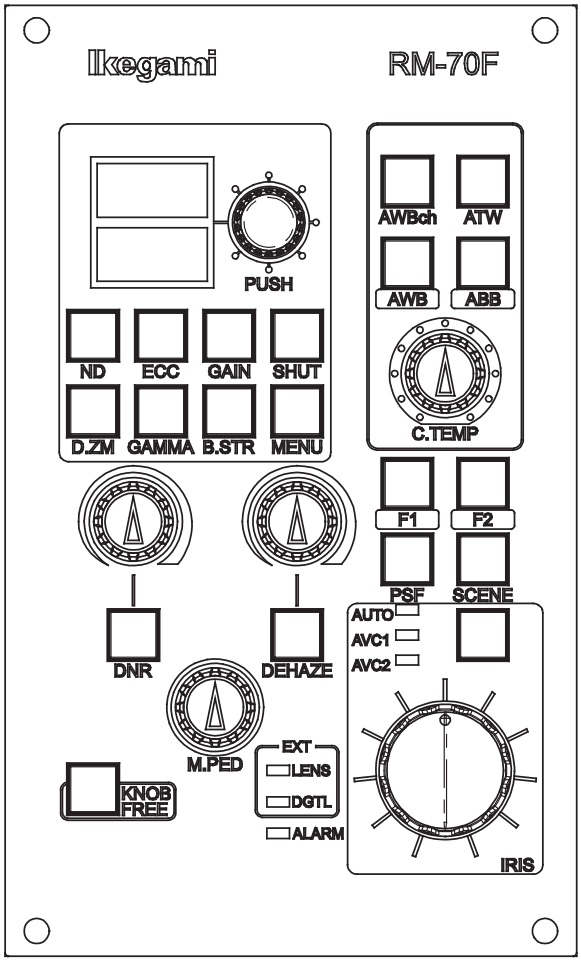
Products conforming to RoHS directive



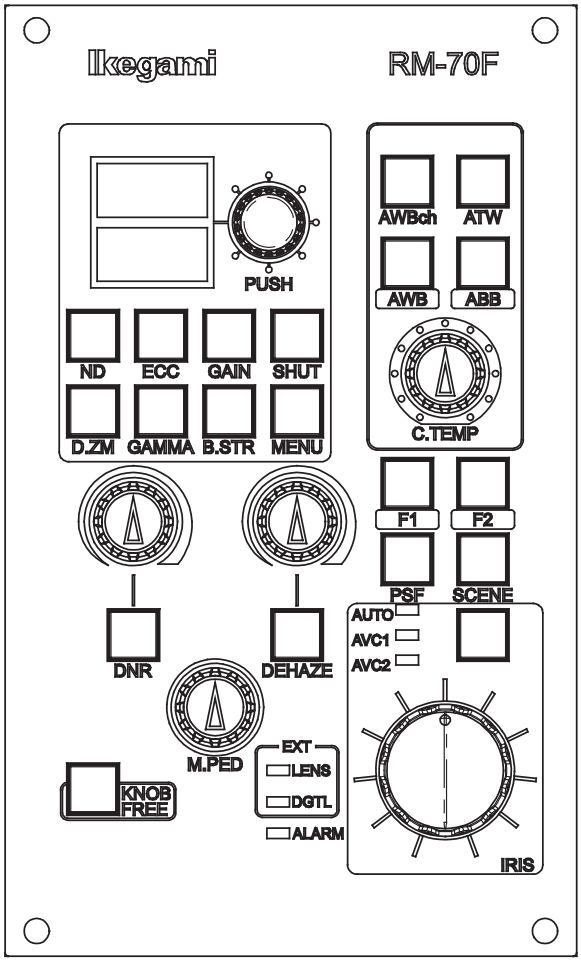
RM-70F

Remote Control Panel

Operation Manual

Ikegami

Products conforming to RoHS directive



RM-70F

Remote Control Panel

Operation Manual

1610 1st Edition (U) (E)

Ikegami

English

Instructions for Disposal of Electric and Electronic Equipment in Private Household

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

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

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

Deutsch

Vorschriften für die Entsorgung von elektrischen und elektronischen Geräten in Privathaushalten

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

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

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

Français

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

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

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

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

Español

Instrucciones para eliminar equipos eléctricos y electrónicos de una casa privada

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

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

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

PRODUCTS CONFORMING TO RoHS DIRECTIVE

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

• RM-70F Remote Control Panel

Products conforming to RoHS directive include products that do not contain specified hazardous substances such as lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyl (PBB) and polybrominated diphenyl ether (PBDE) in electrical and electronic equipment excluding following exemption applications based on the EU directive (Directive 2002/95/EC).

* About RoHS Directive

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

● Applications exempted from RoHS directive compliance

Followings applications are permitted as exemptions from RoHS directive compliance.

1. Mercury in compact fluorescent lamps not exceeding 5mg per lamp
2. Mercury in straight fluorescent lamps for general purposes not exceeding:
   - · halophosphate 10mg
   - · triphosphate with a normal lifetime 5mg
   - · triphosphate with a long lifetime 8mg
3. Mercury in straight fluorescent lamps for special purposes
4. Mercury in other lamps not specifically mentioned in this Annex
5. Lead in the glass of cathode ray tubes, electronic components and fluorescent tubes
6. Lead as an alloying element in steel containing up to 0.35% lead by weight, aluminum containing up to 0.4% lead by weight and as a copper alloy containing up to 4% lead by weight
7. Lead in following items
   - · Lead in high melting temperature type solders (i.e. tin-lead solder alloys containing more than 85% lead)
   - · Lead in solders for servers, storage and storage array systems
   - · Lead in solders for network infrastructure equipment for switching, signaling, transmission as well as network management for telecommunication
   - · Lead in electronic ceramic parts (e.g. piezoelectronic devices)

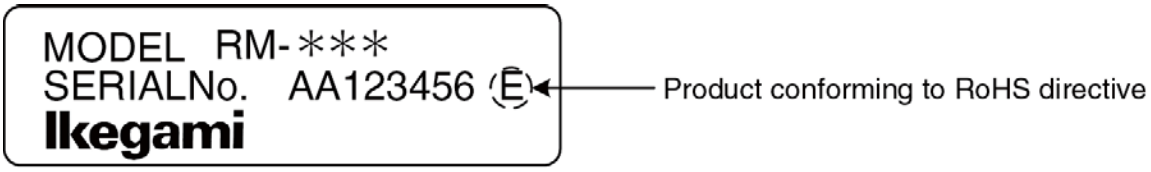
8. Cadmium plating except for applications banned under Directive 91/338/EEC amending Directive 76/769/EEC relating to restrictions on the marketing and use of certain dangerous substances and preparations
9. Hexavalent chromium as an anti-corrosion of the carbon steel cooling system in absorption refrigerators
10. Lead used in compliant pin connector systems
11. Lead as a coating material for the thermal conduction module C-ring
12. Lead and cadmium in optical and filter glass
13. Lead in solders consisting of more than two elements for the connection between the pins and the package of microprocessors with a lead content of more than 80% and less than 85% by weight
14. Lead in solders to complete a viable electrical connection between semiconductor die and carrier within integrated circuit Flip Chip packages
15. Decabrominated diphenyl ether (Deca-BDE) in polymeric applications

MAINTENANCE OF PRODUCTS CONFORMING TO RoHS DIRECTIVE

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

1. Identification

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



Label

· Print-circuit board of the products conforming to RoHS directive is manufactured by following methods.

[1] Blue resist ink is used for the print-circuit board. (The color of conventional print-circuit board is green.)

[2] Either one of the following marks is indicated by a serigraph or label.

Phase 3A

Phase 3

2. Soldering

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

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

3. Parts

Be sure to use parts conforming to RoHS directive.

INFORMATION TO THE USER

This equipment has been tested and found to comply with the limits for a Class A digital device, against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.
Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

The CE mark means that the following products will meet the Directives 2004/108/EC and standards EN55032, EN55103- 2 (for the Electromagnetic environment E4-E5).

Use shielded cable.
This equipment doesn't intend to use at residential areas, so that use in residential areas may cause interference.

Please attach a core to a cable to connect to a connector of command, Ethernet cable and EXT by all means. Please make an inquiry to us about the installation of the core, if necessary.

SAFETY PRECAUTIONS

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

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

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

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

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

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

	Indicates prohibited action.

■ *Handling Precautions*

⚠ WARNING

Regarding the Product

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

Regarding the Power

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

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

⚠ CAUTION

Regarding the Product

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

Be sure to hold the plug and pull when you disconnect the cable.
Failure to do so may cause a fire or electric shock due to a broken cable.

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

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

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

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

HOW TO READ THE OPERATION MANUAL

This page explains general notes on reading the RM-70F Operation Manual, and the symbols and notations used in the manual.

■*Notes on the Manual*

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

■*Symbols*

The symbols used in this manual are as follows.

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

■*Notations*

The following notations are used in this manual.

This product, RM	Indicates RM-70F Remote Control Panel
Camera	Indicates general broadcast cameras.

■*Illustrations and Displays*

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

■*Related Manuals*

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

RM-70F
Operation Control Panel

OPERATION MANUAL

CONTENTS

1. Outline

1.1 Outline

The RM-70F is an operation control panel that is used by connection to a BS (Base Station) or CCU (Camera Control Unit) or Camera Head.

1.2 Features

● Knob Free function is adopted

The RM-70F adopts the knob free function which combines the advantages of absolute control of potentiometers with the advantages of relative control of rotary encoders.

By pressing and holding the Knob Free switch, the potentiometers (excluding iris control) are electronically disconnected from controlling the camera. So they can be re-indexed to mid-range for reference or turned to the opposite end when the mechanical

range of the control hits the end, but the function itself has more control range.

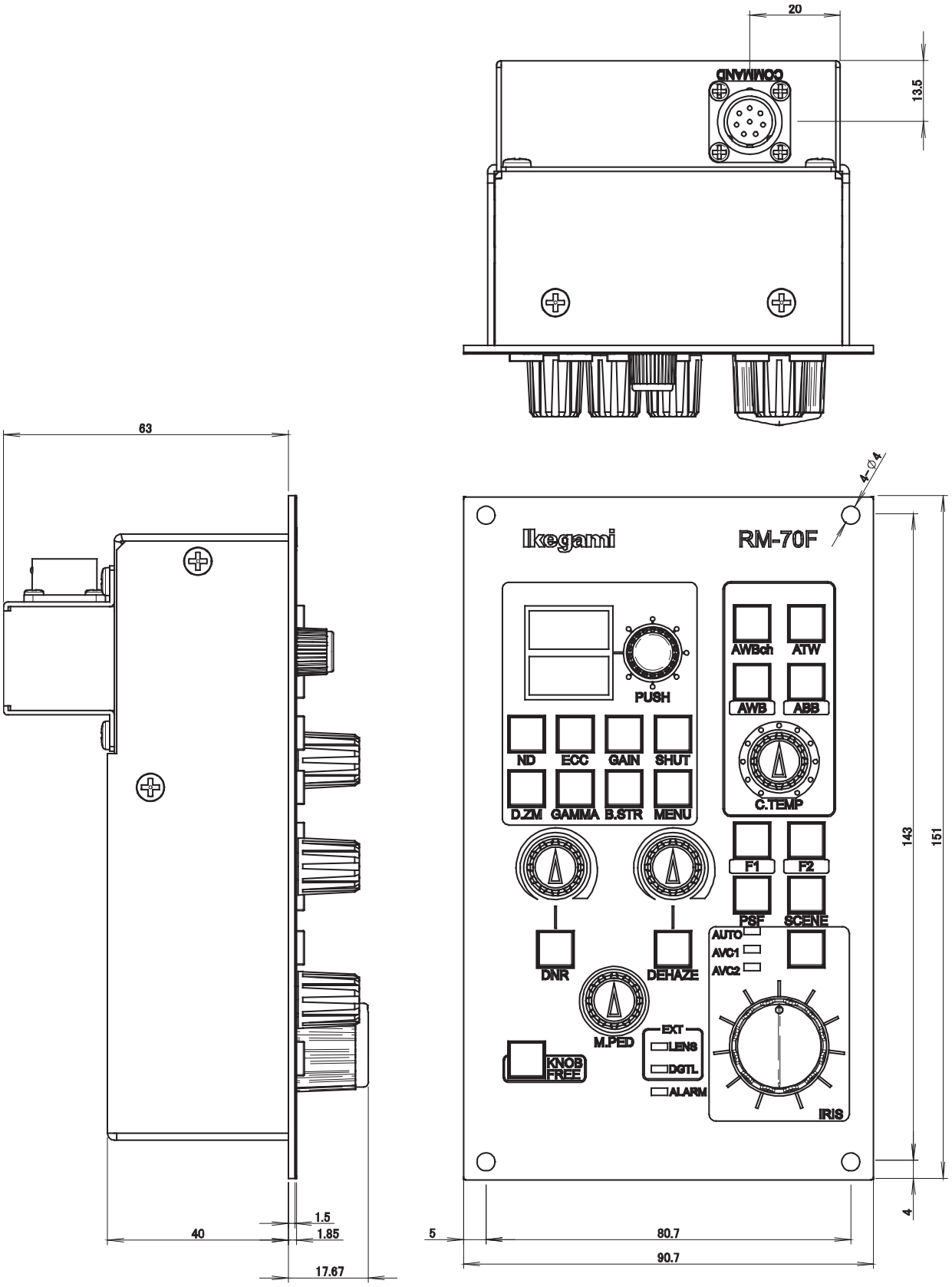
● F. Switch

Two F. switches (F1/F2) are provided, so the user can set the functions freely. Assigning functions necessary for each user is available, and so the operational flexibility expands.

Note: Switches of the RM and control functions become inoperable if the connecting camera does not have the corresponding functions.

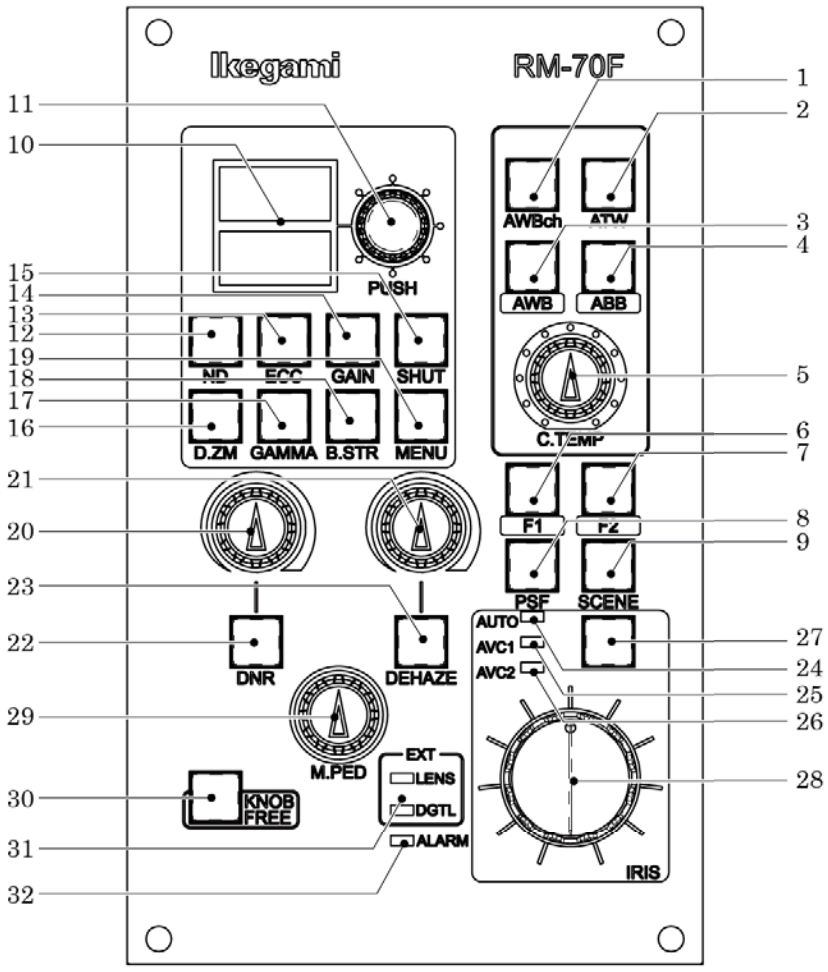
Reference: Refer to the instruction manual of the camera for functions that can be operated.

1.3 External View



2. Name and Function of Each Part

This section describes the name and function of various parts.



1	AWBch switch	17	GAMMA switch
2	ATW switch	18	B.STR switch
3	AWB switch	19	MENU switch
4	ABB switch	20	DNR control
5	C.TEMP control	21	DEHAZE control
6	F(User Function) 1 switch	22	DNR switch
7	F(User Function) 2 switch	23	DEHAZE switch
8	PSF switch	24	AUTO indicator
9	SCENE switch	25	AVC1 indicator
10	Character indicator	26	AVC2 indicator
11	Rotary switch	27	IRIS mode selector switch
12	ND switch	28	IRIS control
13	ECC switch	29	MASTER PED control
14	GAIN switch	30	KNOB FREE switch
15	SHUT switch	31	EXT indicator
16	D.ZM switch	32	ALARM indicator

2.1 AWBch Switch

Switches the memory channel of AWB (Auto White Balance).
When switching the channel, use the character indicator and the rotary switch.

2.2 ATW Switch

Executes the ATW function.

2.3 AWB Switch

It performs AWB (Auto White Balance).
When AWB is completed, the lamp lights off. When AWB fails, the lamp blinks.
After checking the failed state, press the blinking switch again to reset the failed state.

2.4 ABB Switch

It performs ABB (Auto Black Balance).
When ABB is completed, the lamp lights off. When ABB fails, the lamp blinks.
After checking the failed state, press the blinking switch again to reset the failed state.

2.5 C.TEMP Controls

Controls the color temperature correction (C.TEMP).

2.6 F(User Function)1 Switches

The On/Off status of various functions can be controlled by these user function switches.

Reference: Refer to "3. F. Switch" for the method to allocate functions.

2.7 F(User Function)2 Switches

The On/Off status of various functions can be controlled by these user function switches.

Reference: Refer to "3. F. Switch" for the method to allocate functions.

2.8 PSF Switch

Executes the PSF function.

2.9 SCENE File Switch

It saves and loads the scene files 1 to 8.

When selecting the scene files, the character indicator and the rotary switch are used.

Reference: Refer to "5. Rotary Switch" for the method to save the scene files.

The scene file ON state is indicated when the switch is lit on. The scene file OFF state is indicated when the switch is lit off. In addition, holding down the switch saves the scene file.

Note: To set controls to the center after loading a scene file, use the knob free function.

2.10 Character Indicator

It indicates the status of functions.

2.11 Rotary Switch

It is used for selecting and changing the functions indicated on the character indicator.

2.12 ND Switch

Switches the ND filter control ON/OFF.

To change ND filter position. Use the character indicator and the rotary switch.

2.13 ECC Switch

Switches the ECC filter control ON/OFF.

To change ECC filter position. Use the character indicator and the rotary switch.

2.14 GAIN Switch

Switches the GAIN setting.

To select gain setting. Use the character indicator and the rotary switch.

2.15 SHUT Switch

Switches the SHUTTER speed.

To select shutter speed. Use the character indicator and the rotary switch.

2.16 D.ZM Switch

Switches the DIGITAL ZOOM control ON/OFF.

To select magnification. Use the character indicator and the rotary switch.

2.17 GAMMA Switch

Switches the GAMMA level to control ON/OFF.

To select the Gamma level. Use the character indicator and the rotary switch.

2.18 B.STR Switch

Switches the BLACK STRETCH level to control ON/OFF.

To select the Black stretch level. Use the character indicator and the rotary switch.

2.19 MENU Switch

Turns ON / OFF the MENU.

Use the character indicator and the rotary switch.

Reference: Refer to "4. Menu Operation from RM".

2.20 DNR Control

Controls the level of the digital noise reducer.

2.21 DEHAZE Control

Controls the level of the dehaze function.

2.22 DNR Switch

Turns ON/OFF the digital noise reducer function.

2.23 DEHAZE Switch

Turns ON/OFF the dehaze function.

2.24 AUTO Indicator

Lights up in AUTO IRIS mode.

2.25 AVC1 Indicator

Lights up in AVC mode 1, and blinks in AVC mode 3.

2.26 AVC2 Indicator

Lights up in AVC mode 2, and blinks in AVC mode 4.

2.27 IRIS Mode selector Switch

When you press the switch, the IRIS mode will be switched as follows.

AUTO IRIS => AVC1 => AVC2 => (AVC3 => AVC4 =>) AUTO IRIS

Operation in () depends on the setting.

When pressing the KNOB FREE switch and push IRIS SEL, IRIS will switch to MANUAL IRIS mode. When you press the switch again, it will be switch back to the AUTO IRIS mode.

2.28 IRIS Control

It controls the lens iris. During AUTO IRIS, it controls the iris by approximately in AUTO IRIS mode +/- 1 stop.

2.29 MASTER PED Control

It controls the master pedestal level.

2.30 KNOB FREE Switch

When pressed the VR controls can be rotated without changing the control function.

2.31 EXT Indicator

It indicates the extender state.

LENS ：It lights up when the lens extender is "ON."

DGTL ：It lights up when the digital zoom is "ON."

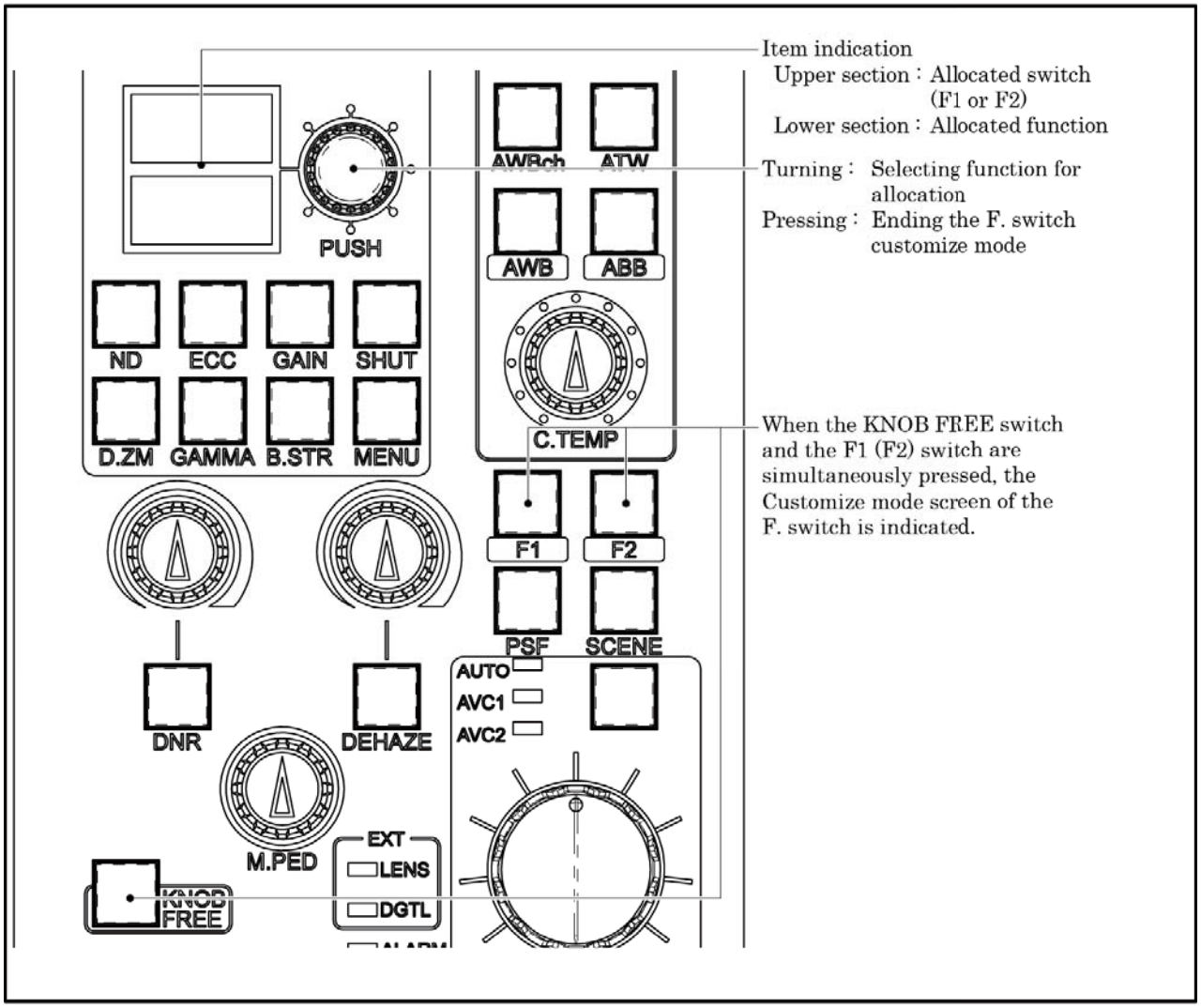
2.32 ALARM Indicator

It blinks when alarm is detected by the self-diagnosis function.

3. F. Switch

The RM-70F allows the user to assign the function of two switches, the F1 and F2 switches.

3.1 F. Switch Customize Function



1. When the F. switch (F1 or F2) is pressed for approximately 2 seconds while the KNOB FREE switch is also pressed, the F. switch customize mode starts.
2. As an initial state of the F. switch customize mode, the switch name to be customized is indicated at the upper section of the indicator and the function currently being allocated is indicated at the lower section of the indicator.

3. When turning the rotary switch, functions to be allocated to the F. switch can be selected.
   * As soon as a function is allocated to the F switch, the state of the allocated function is reflected on the LED.
4. When the F. switch is pressed in the F. switch customize mode, turning the allocated function on and off is possible.
5. Pressing the rotary switch will allocate the function selected in Step 3, and it will end the F. switch customize mode.

3.2 List of Switch Functions

Item	Indicated Letters	Function	Remarks
Empty	EMPT	No function	
BARS	BARS	BARS ON/OFF	
CAP	CAP	CAP ON/OFF	
CAL	CAL	CAL 100%/200%/OFF	200% is blinking.
Knee	KNEE	Knee ON/OFF	
Auto Knee	AKNE	AutoKnee ON/OFF	
Flare	FLR	Flare ON/OFF	
DTL	DTL	DTL ON/OFF	
Soft DTL	SOFT	Soft DTL ON/OFF	
Skin DTL	SKIN	Skin DTL ON/OFF	
Hi-Light DTL	HDTL	Hi-LightD ON/OFF	
White Clip	WCLP	WhiteClip ON/OFF	
Matrix	MTRX	Matrix ON/OFF	
Color SAT.	CSAT	Color SAT ON/OFF	
Color CORR.	CCOR	ColorCOR ON/OFF	
VR Clear	VRCL	VR Clear execute	Long press
AVC1	AVC1	AVC1 ON/OFF	
AVC2	AVC2	AVC2 ON/OFF	
AVC3	AVC3	AVC3 ON/OFF	
AVC4	AVC4	AVC4 ON/OFF	
Digital Zoom	D.ZM	Digital Zoom ON/OFF	

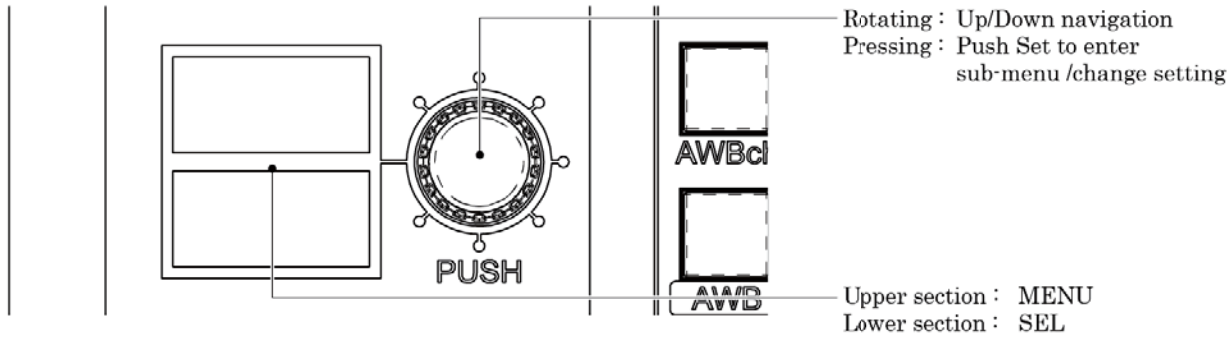
3.2.1 VR Clear Operation

Allocating "VR Clear" to the F. switch will clear the data that the user adjusted.

4. Menu Operation from RM

The menu of the camera head can be operated with the MENU switch.

[Menu Operation]



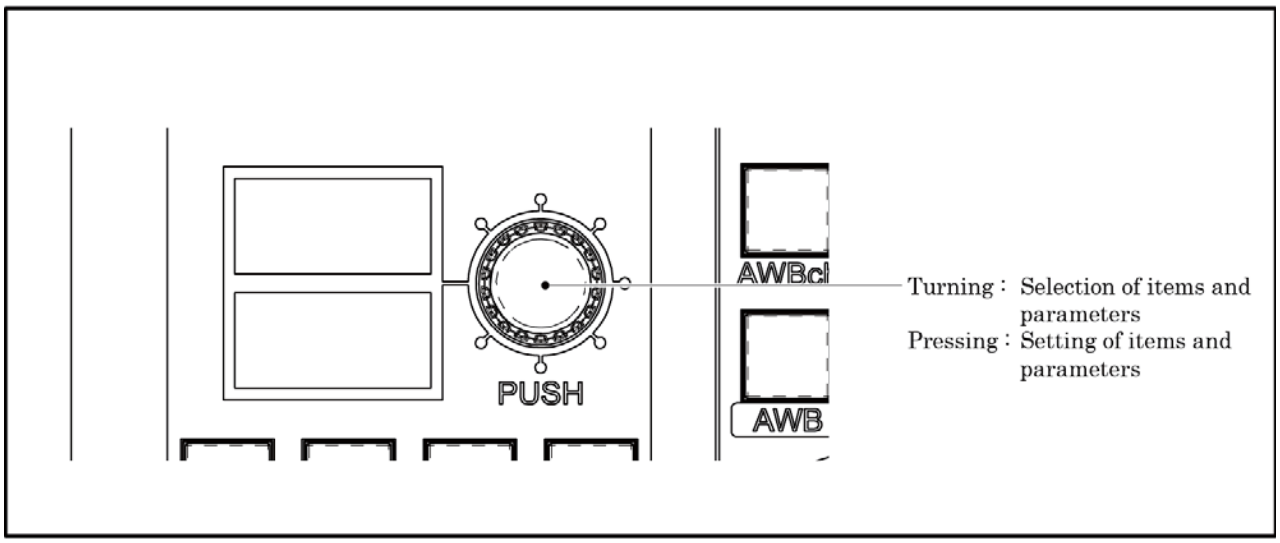
Menu screen

1. When the MENU switch is pressed for approximately 2 seconds, the menu operation mode starts, and the menu screen of the camera is displayed.
2. As the initial state of the menu operation mode, "MENU" is indicated at the upper section of the indicator, and "SEL" is indicated at the lower section of the indicator.
3. Navigate the menu by turning the rotary switch.
4. Enter a sub-menu and set a change by pressing the rotary switch.
5. Pressing the MENU switch again can ends the menu operation mode.

5. Rotary Switch

The rotary switch enables various functions to be selected and set.

5.1 Selection and Setting of Rotary Switch Functions



<Selection and Operation with Rotary SW>

1. Turn the rotary switch to select the item to be controlled in the upper section of the item indicator.
2. When the rotary switch is pressed, the function setting at the lower section of the indicator starts blinking. Then changing the setting of the function becomes possible.
3. Turn the rotary switch again and set the function.
4. Press the rotary switch to exit the setting of the function.

<Direct SW operation>

When you select the following each direct SW, operation with the rotary SW will be enabled immediately.

ND/ECC/GAIN/SHUT/D.ZM/GAMMA/B.STR/MENU switch

1. Select a direct SW, and the items and the current state will be displayed in the upper and the lower parts of the indicator respectively.
2. Turn the rotary SW and switch the parameter.

＊The LED lighting condition of each direct SW changes as follows.

・Operation selected : LED green (bright) lighting

・Operation deselected

Function standard : LED green (dark) lighting (Shaded items in standard.)

Function non-standard : LED amber color

5.2 List of Rotary Switch Functions

Item	Indicated Letters	Function	Remarks
ND	ND	Select	**1**,2,3,4
ECC	ECC	Select	**A**,B,C,D
Step Gain	Gain	Select	-6, -3, **0**, +3, +6, +9, +12, +18, +24, +30, +36, +42, +48, +54, +60, +66, +72,
Step Gamma	Gamm	Select	OFF, **0.45**, 0.40, 0.35
Gamma Mode	GMod	Select	NOR, CINE1,2
BLK STR/PRS	Bkst	Select	-11, -9, -7, -5, -3, **OFF**, +3, +5, +7, +9, +11
AWB ch	AWB	Select	Bch, **Ach**, OFF
Shutter Mode	Shut	Select	**OFF**/PRE/VAR
Shutter Speed	Sped	Select	**OFF** , 2S, 1S, 2, 3, 4, 5, 6, 8, 10, 12, 15, 30, 100, 120, 125, 250, 500, 1000, 2000, 4000, 10K
Digital Zoom	D.ZM	OFF/ magnificatio	×1.1 to ×10.0 (0.1 increments), **OFF**
DTL	DTL	ON/OFF	
Flare	FLR	ON/OFF	
Knee	KNEE	ON/OFF	
Super Knee	SPKn	Select	OFF, LOW, MID, HIGH
Smooth Knee	SMKn	Select	OFF, 1～3
WhiteClip	WCLP	ON/OFF	
Color SAT	CSAT	ON/OFF	
SCENE	SCEN	Select	1～8

5.3 SCENE FILE Setting Method

With the rotary switch scene files 1 to 8 can be selected. Pressing the SCENE switch enables saving and loading of the scene file which has been selected.

[SCENE FILE saving method]

1. Turn the rotary switch to select "SCENE" at the upper section of the indicator.
2. Press the rotary switch and select the FILE number to be set, shown at the lower section of the indicator.
3. Hold down the SCENE switch for about 2 seconds.
4. The scene file selected in Step 2 is saved.

[SCENE FILE loading method]

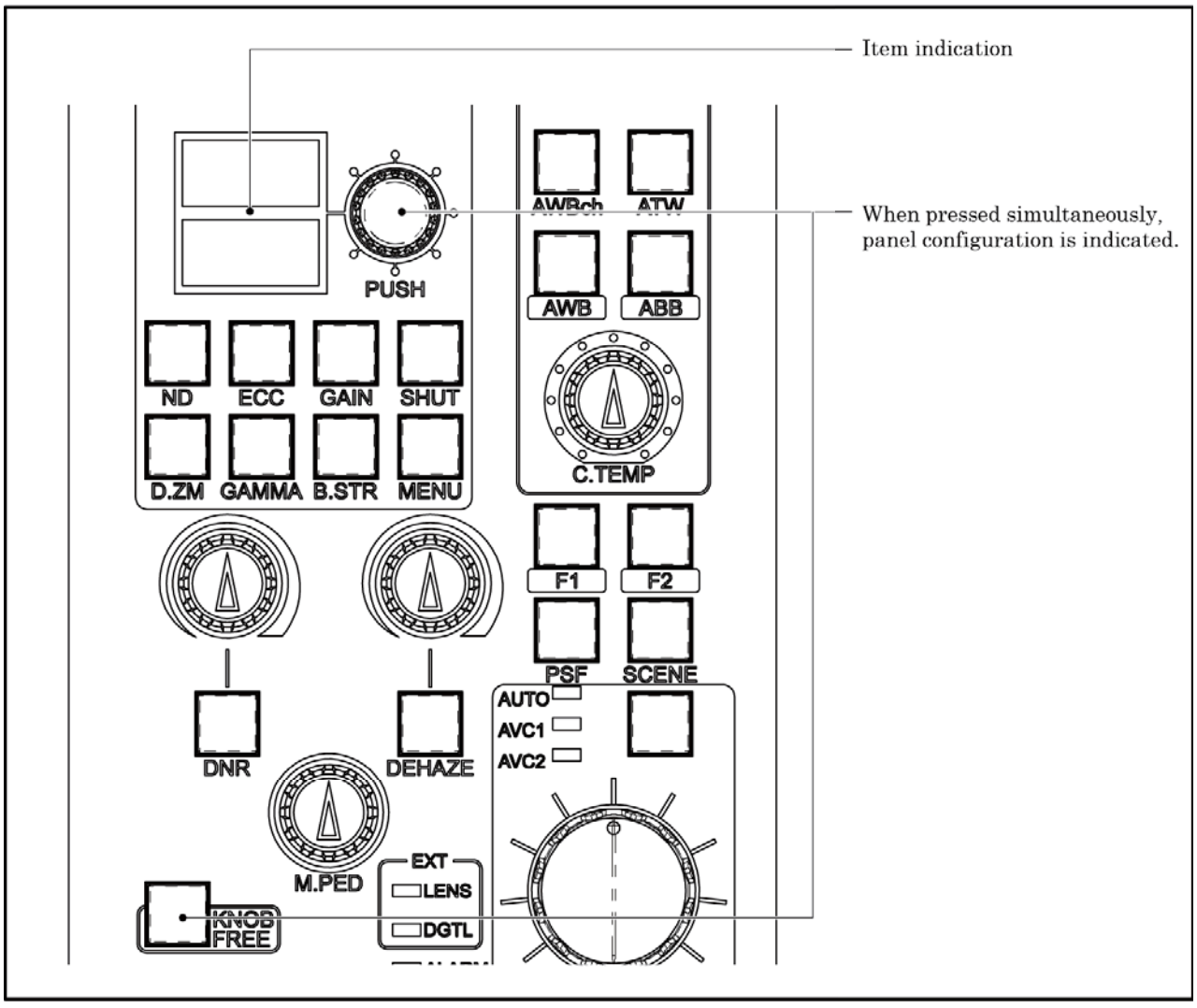
1. Turn the rotary switch to select "SCENE" at the upper section of the indicator.
2. Press the rotary switch and select the FILE number to be read, shown at the lower section of the indicator.
3. The FILE number selected in Step 2 is now allocated to the SCENE file switch and ON/OFF operation becomes available.

Note: When the FILE number is switched while a SCENE file is already ON, the switched scene file is loaded the next time the Scene switch is pressed.

6. Panel Configuration

The RM-70F has many functions, and its operation and settings can be setup to meet the user's requirements.

6.1 Panel Configuration Menu



1. Press the rotary switch and the Knob Free switch simultaneously for approximately 2 seconds. After two seconds, the upper section of the item indication area indicates the STR number, and the lower section indicates the checksum of the software version.
2. After indication of the STR number, the panel configuration menu is indicated.
   * Turning or pressing the rotary switch, will skip indication of the STR number and checksum.
3. After the menu indication, setting items can be selected by turning the rotary switch.

4. Press the rotary switch and the setting of the selected item starts blinking.
5. Next the setting can be changed by turning the rotary switch.
6. When the desired setting is displayed, push the rotary switch.
7. Exit the Panel Configuration menu by selecting Exit and pressing the rotary switch. Or press the Knob Free switch and rotary switch simultaneously.

6.2 List of Panel Configuration Settings

Item	Function	Mode
IRIS MODE	Select	ABS(Absolute value control), REL(Relative value control)
MPED RANGE	Select	STD, 1/2, 1/4, OFF
VR DISP	VR value display *	ON, OFF
BUZZER	Select	STD, ATT, OFF
AVC SELECT	Select	1-2, 1-4
ADJUST MODE	IRIS operation position adjustment function	
USER MODE	Select	COMP, BASIC
RAM CLR	Select	MENU, ALL
EXIT	Menu mode Exit	

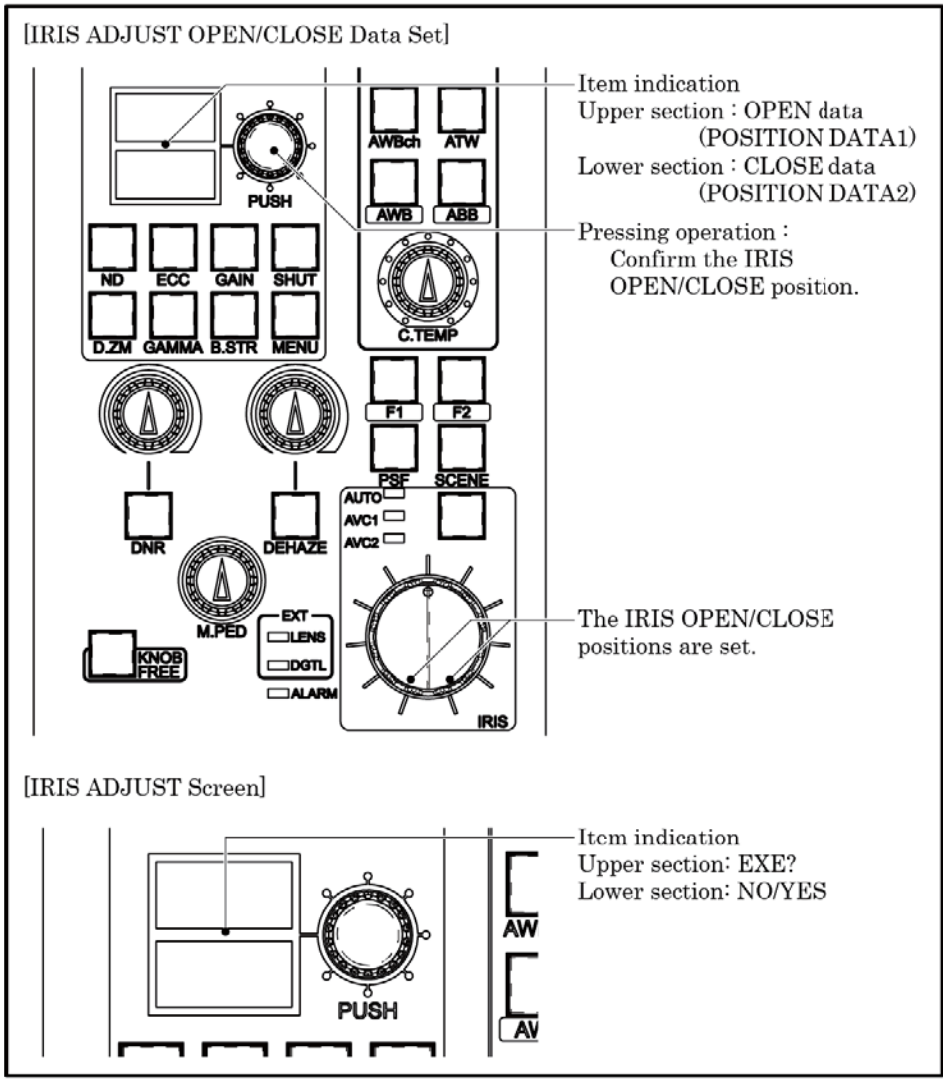
* VR value display ON / OFF is, DNR ・DEHAZE function only.
(M.PED ・IRIS is no display)

6.3 IRIS Position Adjustment Function

It is possible that the lens iris is not at the OPEN/CLOSE end when the RM iris is at the OPEN/CLOSE end, even under full range operation. The RM-70F has a function to recognize the OPEN/CLOSE end positions of the iris in the panel configuration menu, and correct the difference with the camera head lens iris value.

Caution: With the camera LENS ADJUST function, check that the iris F stop control is correct at the camera head. Please note, the open/close end positions are already adjusted for the RM-70F at the factory prior to shipment.

Reference: For the LENS ADJUST function, refer to the operation manual of the connected camera. Some cameras do not have the LENS ADJUST function.



1. Select "ADJUST MODE" under the panel configuration menu.
2. On the character indicator, "POS1" is indicated at the upper section and "POS2" at the lower section.
3. Align the IRIS position to the OPEN end and press the rotary switch. ("POS1" indicated at the upper section of the character indicator changes to "OK.")
4. Align the IRIS position to the CLOSE end and press the rotary switch. ("POS2" indicated at the lower section of the character indicator changes to "OK.")
5. Two seconds after both upper and lower sections of the character indicator indicate "OK," the upper section changes to "EXE?" and the lower section changes to "NO" on the indicator.
6. When the rotary switch is rotated and operated, Yes and No can be switched. To finalize the setting, select "Yes." To cancel, select "No." Then, press the rotary switch.
7. When "YES" is selected, execute the IRIS ADJUST setting. The panel restarts. When "No" is selected, the panel returns to the top page of the panel configuration.

6.4 Limit Functions (Control Depth)

By selecting the operation from two modes, [COMPLETE or BASIC] under "USER MODE" of the panel configuration menu, the selection for the F1 and F2 switches, as well as, the selection for the rotary switch can be limited. All functions are available in the COMPLETE(indication: COMP) mode, and limited functions are available in the BASIC(indication: BSIC) mode as indicated in the lists "6.4.1 and 6.4.2".

6.4.1 List of Limited Functions for F. Switch Selection

Item	Function	Mode
Empty	No function	BASIC
BARS	BARS ON/OFF	BASIC
CAP	CAP ON/OFF	BASIC
CAL	CAL 100%/200%/OFF	BASIC
Knee	Knee ON/OFF	
Auto Knee	Auto Knee ON/OFF	BASIC
Flare	Flare ON/OFF	
DTL	DTL ON/OFF	
Soft DTL	Soft DTL ON/OFF	
Skin DTL	Skin DTL ON/OFF	
Hi-Light DTL	Hi-Light DTL ON/OFF	
White Clip	White Clip ON/OFF	
Matrix	Matrix ON/OFF	
Color SAT	Color SAT ON/OFF	
Color CORR	Color CORR ON/OFF	
VR Clear	VR Clear execute	BASIC
AVC1	AVC1 ON/OFF	BASIC
AVC2	AVC2 ON/OFF	BASIC
AVC3	AVC3 ON/OFF	BASIC
AVC4	AVC4 ON/OFF	BASIC
Digital Zoom	Digital Zoom ON/OFF	BASIC

6.4.2 List of Limited Functions for Rotary Switch

Item	Function	Mode
ND	Select	BASIC
ECC	Select	BASIC
Step Gain	Select	BASIC
Step Gamma	Select	BASIC
Gamma Mode	Select	
BLK STR/PRS	Select	BSIC
AWB ch	Select	BSIC
Shutter Mode	Select	BSIC
Shutter Speed	Select	BSIC
Digital Zoom	OFF/ magnification	BSIC
DTL	ON/OFF	
Flare	ON/OFF	
Knee	ON/OFF	
Super Knee	Select	
Smooth Knee	Select	
WhiteClip	ON/OFF	
Color SAT	ON/OFF	
SCENE	Select	BSIC

7. Specification

7.1 Rating

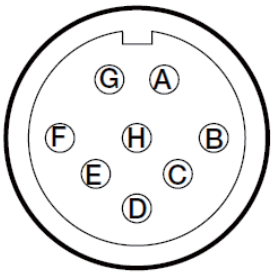
Power supply	+12V (+9V to 18V)
Consumed power	3W
Max. cable length	300m (CP cable)
	100m(LAN cable)
Operation temperature	0°C to +45°C
Storage temperature	-25°C to +60°C
Operation humidity range	30% to 90% (no condensation)

7.2 Pin Function of External Connector

7.2.1 COMMAND Connector

— SEAT —

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



Main body side: PRC05-R8M

Cable side: PRC05-199P9-8F (8-pin female plug) or equivalent

Insert side

Pin No.	Name	Function	Direction	External Interface
A	HED (+)	Serial command from BS/CCU to OCP Data input (+)	IN	
	A	Network command between CP HUB and OCP Data input/output (A)	IN/OUT	
B	HED (-)	Serial command from BS/CCU to OCP Data input (-)	IN	
	B	Network command between CP HUB and OCP Data input/output (B)	IN/OUT	
C	HEC (+)	Serial command from OCP to BS/CCU Data output (+)	OUT	
D	HEC (-)	Serial command from OCP to BS/CCU Data output (-)	OUT	
E	+12V IN	DC+12V power supply input	IN	
F	+12V RET	Grounding DC+12V power supply input	OUT	
G	NC	----------		
H	NC	----------		

8. Changing Information

8.Changing Information

3. F.Switch

3.2 List of Switch Functions

Item	Indicated Letters	Function	Remarks
Empty	EMPT	No function	
BARS	BARS	BARS ON/OFF	
CAP	CAP	CAP ON/OFF	
CAL	CAL	CAL 100%/200%/OFF	200% is blinking
Knee	KNEE	Knee ON/OFF	
Auto Knee	AKNE	AutoKnee ON/OFF	
Flare	FLR	Flare ON/OFF	
DTL	DTL	DTL ON/OFF	
Soft DTL	SOFT	Soft DTL ON/OFF	
Skin DTL	SKIN	Skin DTL ON/OFF	
Hi-Light DTL	HDTL	Hi-LightD ON/OFF	
White Clip	WCLP	WhiteClip ON/OFF	
Matrix	MTRX	Matrix ON/OFF	
Color SAT	CSAT	Color SAT ON/OFF	
Color CORR	CCOR	ColorCOR ON/OFF	
VR Clear	VRCL	VR Clear execute	Long press
AVC1	AVC1	AVC1 ON/OFF	
AVC2	AVC2	AVC2 ON/OFF	
AVC3	AVC3	AVC3 ON/OFF	
AVC4	AVC4	AVC4 ON/OFF	
Digital Zoom	D.ZM	Digital Zoom ON/OFF	

6.4Limit Function (Control Depth)

6.4.1 List of Limited Functions for F.Switch Selection

Item	Function	Mode
Empty	NO function	BASIC
BARS	BARS ON/OFF	BASIC
CAP	CAP ON/OFF	BASIC
CAL	CAL 100%/200%/OFF	BASIC
Knee	Knee ON/OFF	
Auto Knee	Auto Knee ON/OFF	BASIC
Flare	Flare ON/OFF	
DTL	DTL ON/OFF	
Soft DTL	Soft DTL ON/OFF	
Skin DTL	Skin DTL ON/OFF	
Hi-Light DTL	Hi-Light DTL ON/OFF	
White Clip	White Clip ON/OFF	
Matrix	Matrix ON/OFF	
Color SAT	Color SAT ON/OFF	
Color CORR	Color CORR ON/OFF	
VR Clear	VR Clear execute	BASIC
AVC1	AVC1 ON/OFF	BASIC
AVC2	AVC2 ON/OFF	BASIC
AVC3	AVC3 ON/OFF	BASIC
AVC4	AVC4 ON/OFF	BASIC
Digital Zoom	Digital Zoom ON/OFF	BASIC

RM-70F

REMOTE CONTROL PANEL

Operation Manual

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by Ikegami Tsushinki Co., Ltd.

Ikegami

Ikegami Tsushinki Co., Ltd.

5-6-16, Ikegami, Ohta-ku, Tokyo, 146-8567, Japan
Phone : +81-(0)3-5700-4114 Fax : +81-(0)3-5748-2200
E-Mail : info_e@ikegami.co.jp
URL : http://www.ikegami.co.jp/en/

Ikegami Electronics (U.S.A.),Inc.
37 Brook Avenue, Maywood, New Jersey 07607, U.S.A.
Phone : +1-201-368-9171 Fax : +1-201-569-1626
E-Mall : engineering@ikegami.com, service@ikegami.com
URL : http://www.ikegami.com

Ikegami Electronics (Europe) GmbH
Ikegami Strasse 1, D-41460 Neuss, GERMANY
Phone : +49-(0)2131-123-0 Fax : +49-(0)2131.102820
E-Mail : info@ikegami.de
URL : http://www.ikegami.de

Ikegami Electronics (Europe) GmbH - UK
Unit E1, Cologne Court, Brooklands Close,
Sunbury-on-Thames, Middlesex, TW16 7EB, UK.
Phone : +44-(0)1932-76 97 00 Fax : +44-(0)1932-76 97 10
E-Mail : technical@ikegami.co.uk, sales@ikegami.co.uk

Ikegami Electronics Asia Pacific Pte.Ltd.
Tampines Central 5, #03-03 CPF Tampines Building,
Singapore 529508
Phone : +65-6260-8820 Fax: +65-6260-8896
URL : http://sg.ikegami.co.jp

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