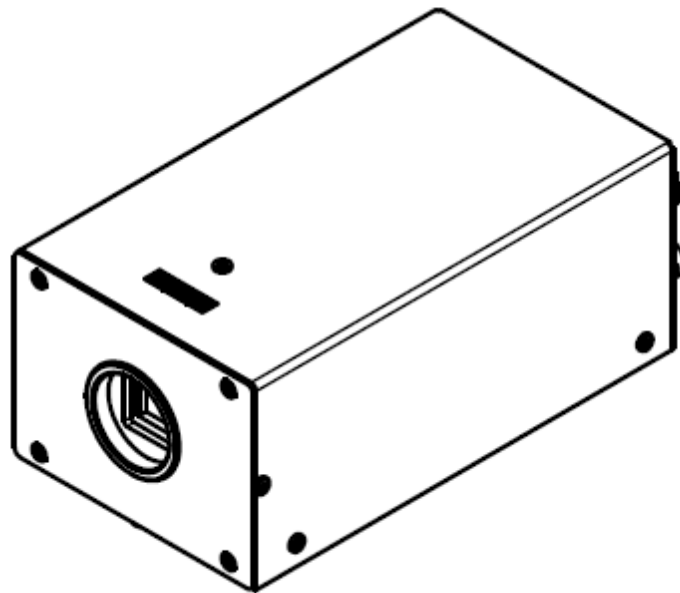




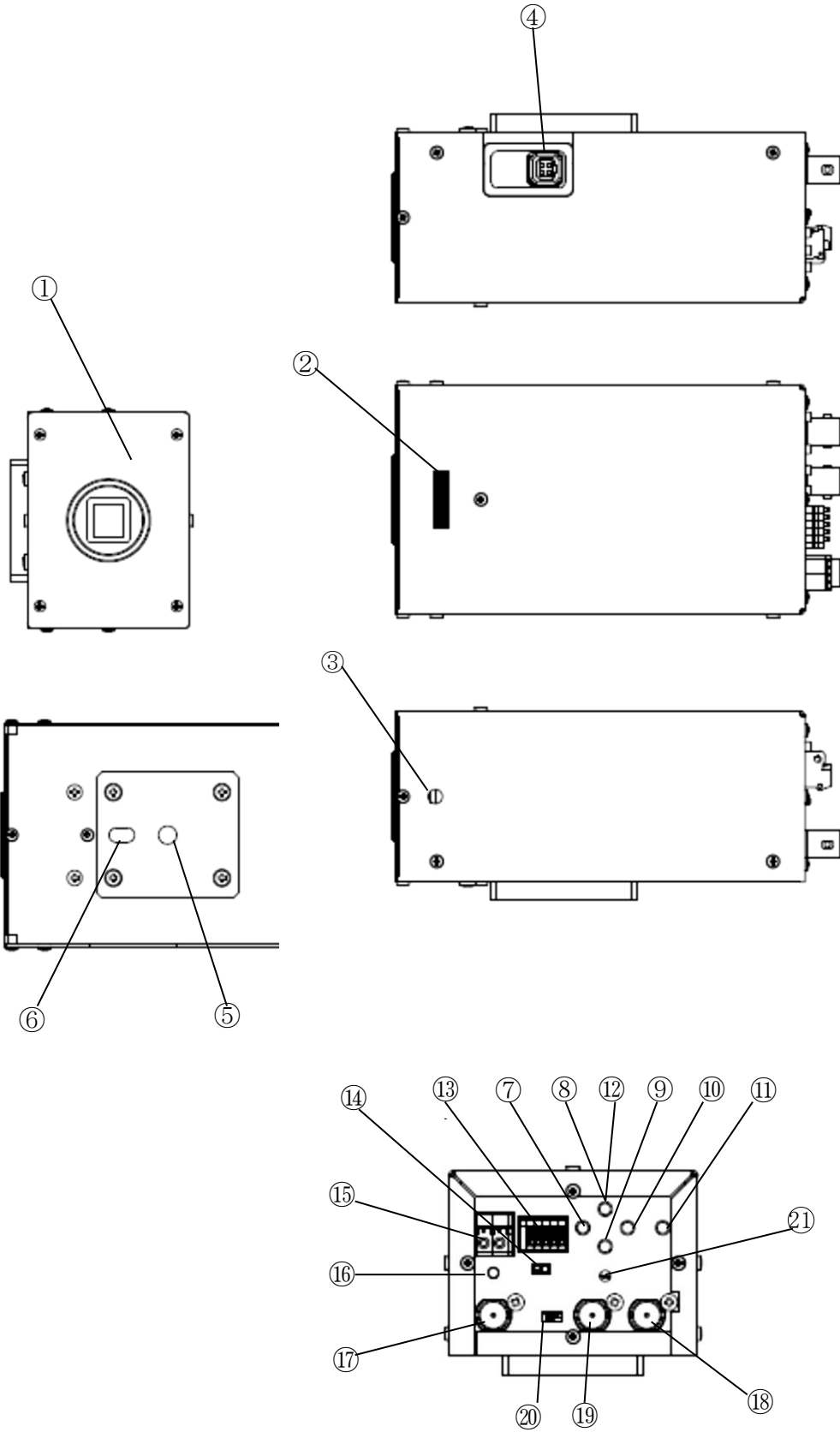
Instruction Manual

Falcon Eye KC-1100

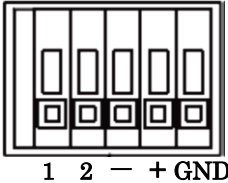
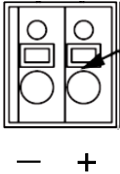


Komamura Corporation

1. Names of Parts



Names of parts

No.	Name
①	CS Lens Mount
②	Flange Back Adjuster
③	Locking Screw for Flange Back Adjuster
④	Auto Iris Connector
⑤	Tripod Socket
⑥	Guide Pin Socket
⑦～ ⑪	Set up switch (Ref: 2. Operation)
⑫	Focus EZ Switch (Ref: 2-5 Special Menu)
⑬	RS-485 (for remote controlling day/night switch) 
⑭	RS-485 Terminal Switch
⑮	DC12V Input Be aware of each polarity 
⑯	Power Indicator
⑰	HD-SDI Output
⑱	SD Output
⑲	Genlock IN For external sync, input VBS, BBS or VS
⑳	Genlock IN Termination Switch Usually set at HIGH.
㉑	RESET Button

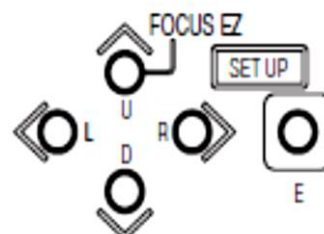
2. Operation

2-1 Set up menu

Set up can be made on OSD.

2-2 Set up buttons

Push switches are located on the camera back.



	Name
U	Up Switch
D	Down Switch
L	Left Switch
R	Right Switch
E	Enter Switch

2-3 Set up mode

Set up menu is consisted Main Menu (ref. page 5) and special Menu (ref. page 1)

2-4 Main Menu

Main Menu will appear after pushing Ebutton for more than 2 seconds. Pushing R button will lead to the next page and L button to return.

MAIN MENU	(PAGE 1/5)
SENSE UP	MOVE ↓
SHUTTER	x64 x1
BLC MODE	OFF
ALC LEVEL	L****I****H
GAIN	HYP-AGC
WHITE BAL	ATW1
DNR	HIGH
MENU LOCK	OFF ↓
EXIT	CANCEL RESET

2-4-1、SENSE (Sensitivity) UP

(1) Setting it up something else rather than OFF or MANUAL, GAIN will be set automatically on AGC. It can also be switchable to HYP-AGC.

① OFF

② S/N

Signal Noise priority mode

For slow motion shooting.

Max GAIN: +21dB on +15dB、HYP-AGC

③ STD

Standard Value

Max. GAIN: +42dB on +36dB、HYP-AGC

④ MOVE

MOVE priority mode

Max. GAIN: +78dB on +54dB、HYP-AGC

⑤ MANUAL

Manual GAIN

For the required magnification, see SHUTTER on MAIN MENU

(2) Set ups of 4 patters of ALC and DAY/NIGHT can be made by pushing the E button after the above modes are selected.

(3) ALC Set Up

A combination of BASED SHUTTER (OFF/Set up value) and HS-SHT LIMIT (OFF/Set Up value) makes it possible to set up 4 patters.

① BASED SHUTTER : OFF, HS-SHT LIMIT : OFF normal mode

② BASED SHUTTER : Set up Value, HS-SHT LIMIT : OFF

The shutter speed becomes slower according to a reduction of incoming light volume. When it comes to the BASED SHUTTER set up value, it stays at a full opening of iris while the shutter speed comes to 1/30 sec at a full opening. While the shutter speed stays at 1/3 sec, Auto Gain starts working and increases the sensitivity up to maximum 16 times with an accumulation mode.

③ BASED SHUTTER : OFF, HS-SHT LIMIT : Set Up value

The shutter speed becomes slower according to a reduction of incoming light volume and once it comes to the set up value of HS-SHT LIMIT, it stays afterward. A maximum increase of auto gain makes iris full opening after accumulation.

④ BASED SHUTTER: Set Up Value, HS-SHT LIMIT : Set Up Value

The shutter speed becomes slower according to a reduction of incoming light volume. When it comes to the BASED SHUTTER set up value, it stays at a full opening of iris while the shutter speed comes to the HS-SHT LIMIT Value. Once the shutter speed comes to the set up value, it stays there. Then Auto Gain comes to a maximum increase.

(4) Setting up DAY / NIGHT

- ① COLOR
- ② B/W
- ③ AUTO

LEVEL setting Switchable to either one of the following level

DARK
MID
BRIGHT
MANUAL

MANUAL setting

COLOR⇒B/W
B/W⇒COLOR

④ REMOTE

Switchable to DAY/NIGHT mode through the optional remote control switch.

Function: ⑬ RS 4 8 5 /DAY/NIGHT switching terminal. Short circuit on 1 - 2 or open on B/W COLOR.

IR TRIG. POL setting on MAIN MENU (PAGE 4/5)

		RS485/DAY/NIGHT switch terminal 1-2	
		Short Circuit	Open Circuit
IR TRIG POL..	BRAKE	COLOR	B/W
	MAKE	B/W	COLOR

(5) FLICKER LESS

- ① OFF
- ② ON Select SHUTTER to 1/100

2-4-2、SHUTTER

(1) In case SENSE (Sensitivity)UP is set OFF, the following shutter speed can be manually selected.

OFF (1/30 or 1/25)、1/50、1/60、1/100、1/125、1/250、1/500、1/1,000、1/2,000、1/4,000、1/10,000、

(2) In case SENSE (Sensitivity)UP is set at S/N、STD、MOVE or MANUAL, the following sensitivity increase ratio can be selected.

x1、 x2、 x4、 x8、 x16、

2-4-3、BLC MODE

For Back Light Control

- (1) OFF
- (2) ON
- (3) SPOT

By moving the cursor by using U、D、L and R buttons、push E button on the required position.

2-4-4、ALC LEVEL

Auto Level Control

2-4-5、GAIN

The Gain value can be selected with L and R Button

When the SENSE UP is set either at S/N、STD or MOVE, or the

DAY/NIGHT is set at AUTO, The GAIN can select (2) AGC or

(3)HYP-AGC only.

* When the SENSE UP is selected either at OFF or MANUAL and DAY/NIGHT is set anything else but AUTO, (1) MANUAL can be selected.

(1) MANUAL

AUTO GAIN can be changed into MANUAL mode. By pushing E button, GAIN works manually between 0 ~ 72dB at 0.3dB step.

(2) AGC

Auto Gain Control

(3) HYP-AGC

Hyper Auto Gain Control

Compared with AGC, it increases the sensitivity by +6dB on S/N, +6dB on STD and +18dB on MOVE.

* In case of SENSE Up on either S/N, STD or MOVE and DAY/NIGHT on AUTO, the GAIN can be selected only on AGC or HYP AGC.

2-4-6、WHITE BAL

(1) ATW1

Auto Tracking White Balance (Standard mode)

(2) ATW2

Auto Tracking White Balance (for wider color temperature setting)

(3) AWC

For one push Auto White Balance Control

(4) MANUAL

For manual white balance setting by adjusting R and B GAIN

2-4-7、DNR

Digital Noise Reduction

(1) OFF

(2) LOW

(3) HIGH

2-4-8、MENU LOCK

(1) Locking MENU LOCK

Push E button on ON

(2) Unlocking MENU LOCK

Push the button in order of U→L→D→R→U→D→E

Start over again when mistake was made.

2-4-9、EXIT、CANCEL、RESET

(1) EXIT

(2) CANCEL

(3) RESET

MAIN MENU	(PAGE 2/5)	
DETAIL	L****I****H	
CHROMA	L****I****H	
BLACK LEVEL	L****I****H	
WDR MODE	OFF	
FOG	OFF	
GAMMA	0.45	
COLOR MATRIX	SETUP	↓
EXIT	CANCEL	RESET

2-4-10、DETAIL

2-4-12、CHROMA

2-4-13、BLACK LEVEL

2-4-14、WDR MODE

Wide Dynamic Range

(1) OFF

(2) WDR

(3) AUTO KNEE

High Light Zone Adjustment

(4) AUTO B STR (Auto Black Stretch)

Shadow zone adjustment

2-4-15、FOG

FOG Mode features fog elimination as long as the scene behind the fog can be recognized. This mode cuts through mist-boosts contrast to enhance clarity.

(1) OFF :

(2) LOW:

(3) MID

(4) HIGH

2-4-16、GAMMA

Gamma setting

(0.45 / 0.75 / 1)

2-4-17、COLOR MATRIX

The adjustment of HUE and SATURATION can be made on R、G、B、Ye、Cy and Mg.

MAIN MENU	(PAGE 3/5)	
FLIP/MIRROR	NORMAL	
ZOOM	x1	
CAMERA ID	OFF	
RS485 ID	1	
P.MASK	OFF	
RS485 BAUD	9600	
VIDEO TEST	LIVE	
EXIT	CANCEL	RESET

2-4-18、FLIP/MIRROR

(1) NORMAL

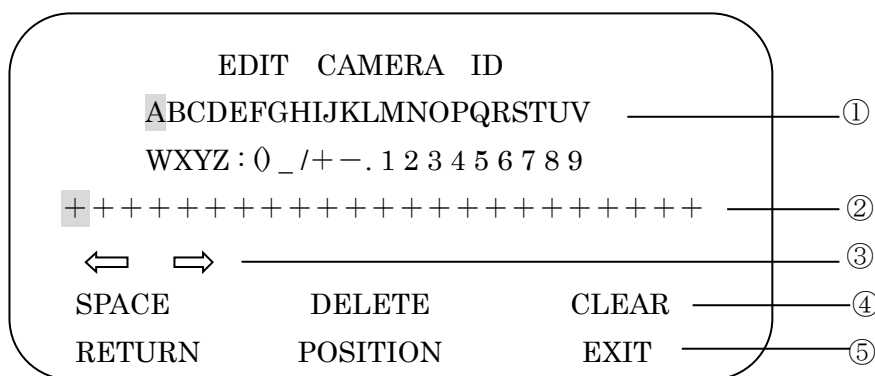
- (2) FLIP
- (3) MIRROR
- (4) FRIP & MIRROR

2-4-19、ZOOM

Selection of electronic zooming ratio (x1, 2, 3, 4, 5, 6, 7, 8, 9, 10)

2-4-20、CAMERA ID

Camera ID setting



①	Character selection by cursor
②	Display window
③	Skip
④	SPACE/ERASE/ERASE ALL
⑤	Display Position

After selecting ⑤Display Position, the ID is shown on the display window and the re-positioning can be made by U, D, L, R buttons.

2-4-21、RS-485 ID

Set up the camera ID through RS-485 from PC.

2-4-22、P.MASK

8 different Privacy Mask can be individually set up.

- (1) OFF
- (2) ON

Display Window will appear by pushing the E button.

```

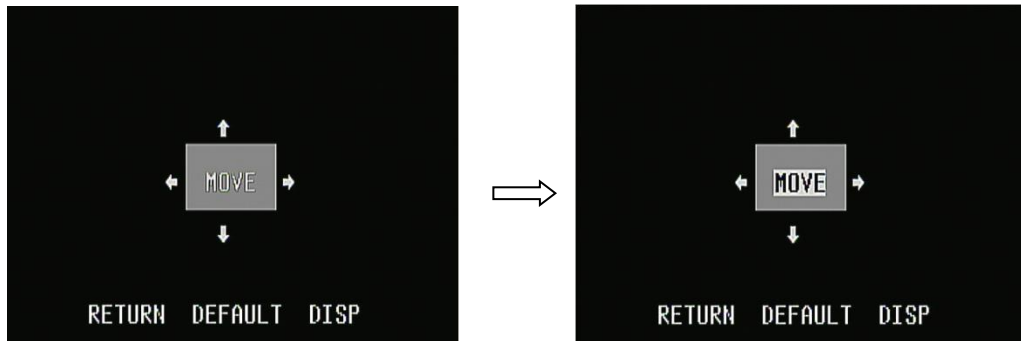
PRIVACY MASK
MASK1      OFF
MASK2      OFF
MASK3      OFF
MASK4      OFF
MASK5      OFF
MASK6      OFF
MASK7      OFF
MASK8      OFF
PAINT      GRAY
RETURN    CANCEL  EXIT

```

ON or OFF can be selected on each MASK.

The color of MASK can be chosen from gray, white or white .

Setting ON and pushing E button, positioning and size of MASK can be selected.



For re-positioning the MASK, push E button and the cursor will stop flashing. Then select the new position by using U, D, L and/or R buttons.

2-4-23、RS485 BAUD

BAUD rate can be selected from 9600 / 19200 / 38400 .

You may contact the local distributor for communication protocol.

2-4-24、VIDEO TEST

- (1) LIVE
- (2) GRAY SCALE
- (3) COLOR BAR
- (4) CROSS LINE

MAIN MENU		(PAGE 4/5)
SDI	FORMAT	1080I/59.94
SDTV	FORMAT	NTSC-J
SDTV	ASPECT	SIDE CUT
SDTV	C. BURST	ON
IR	TRIG POL.	MAKE
GENLOCK		OFF
EXIT	CANCEL	RESET

2-4-25、SDI FORMAT

Signal format for HD output can be selected.

2-4-26、SDTV FORMAT

(1) NTSC-J

For Japan

PEDESTAL : 0 IRE

(2) NTSC-M

For USA and other NTSC areas.

PEDESTAL : 7.5 IRE

2-4-27、SDTV ASPECT

(1) LETTER BOX

(2) SIDE CUT

(3) SQUEEZE

2-4-28、SDTV C.BURST

(1) OFF

(2) ON

2-4-29、IR TRIG POL

2-4-30、GENLOCK

MAIN MENU	(PAGE 5/5)	
MODEL NAME	SSC-9100	
MAIN VERSION	0.00	
FIRM VERSION	106	
FPGA VERSION	601F	
EXIT	CANCEL	RESET

2-4-3 1、MODEL NAME & VERSION

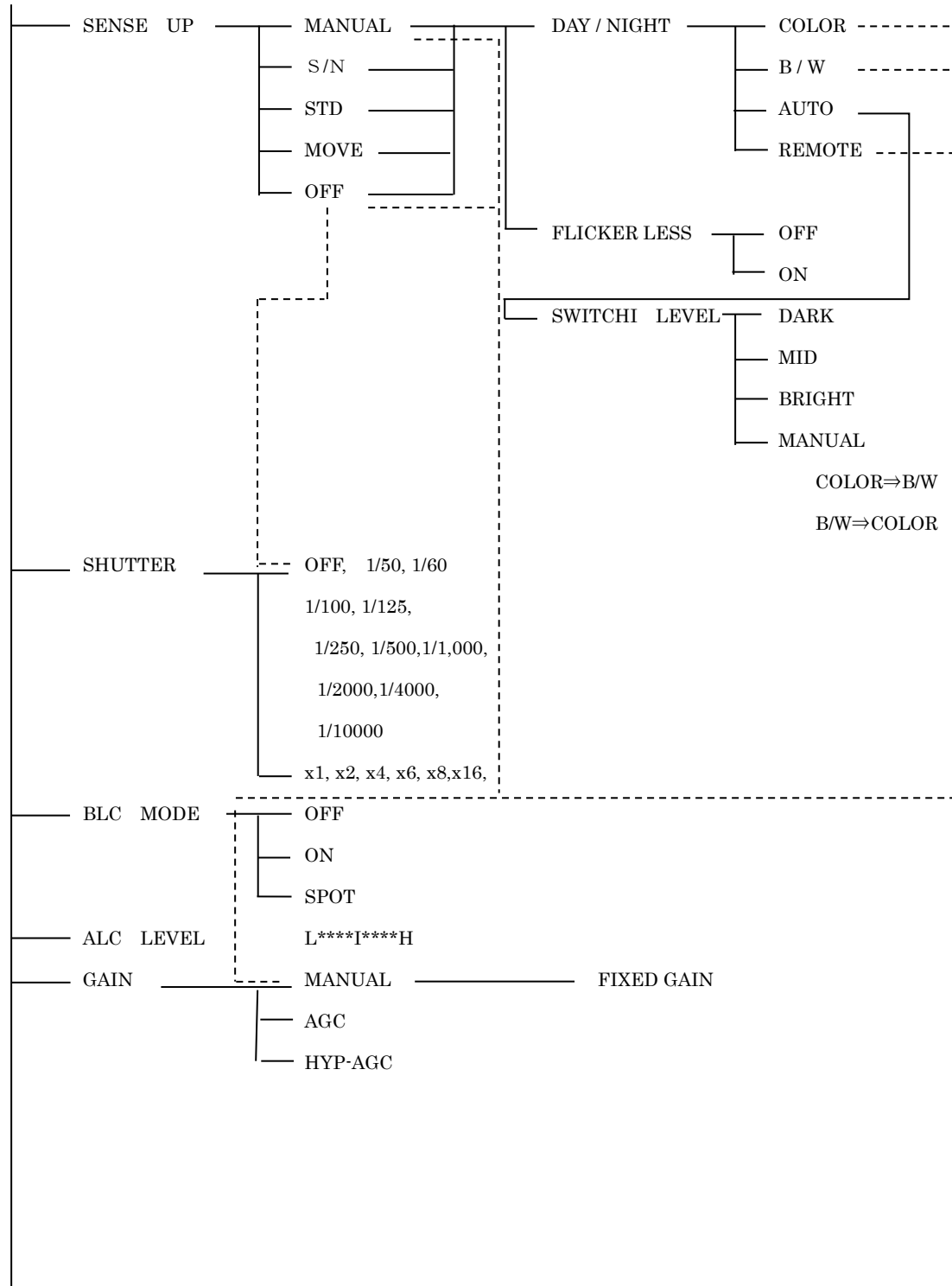
- (1) MODEL NAME
- (2) MAIN VERSION
- (3) FIRM VERSION
- (4) FPGA VERSION

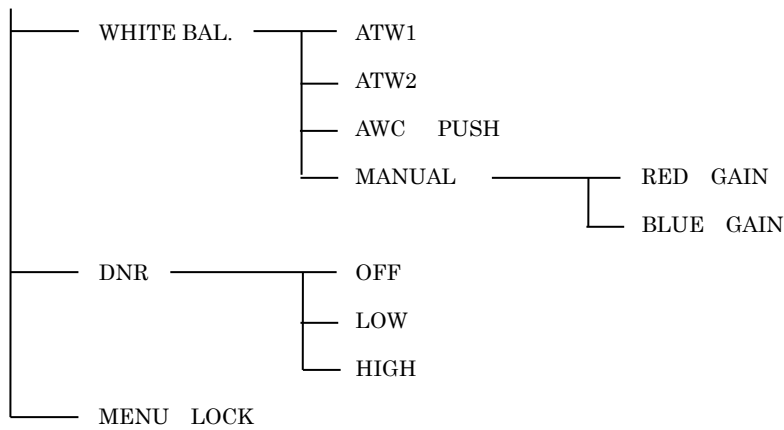
4. MENU

4-1 MAIN MENU

PAGE

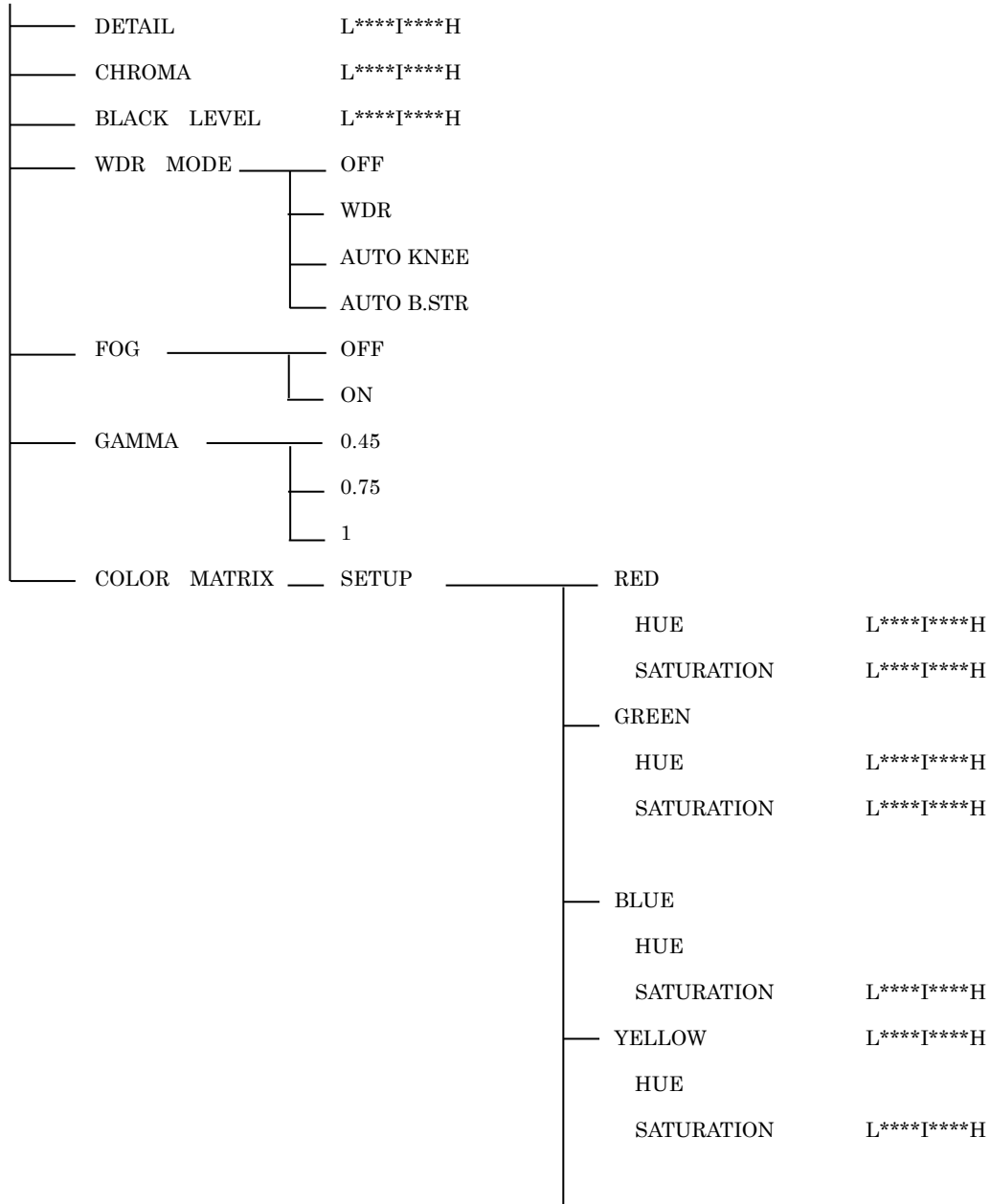
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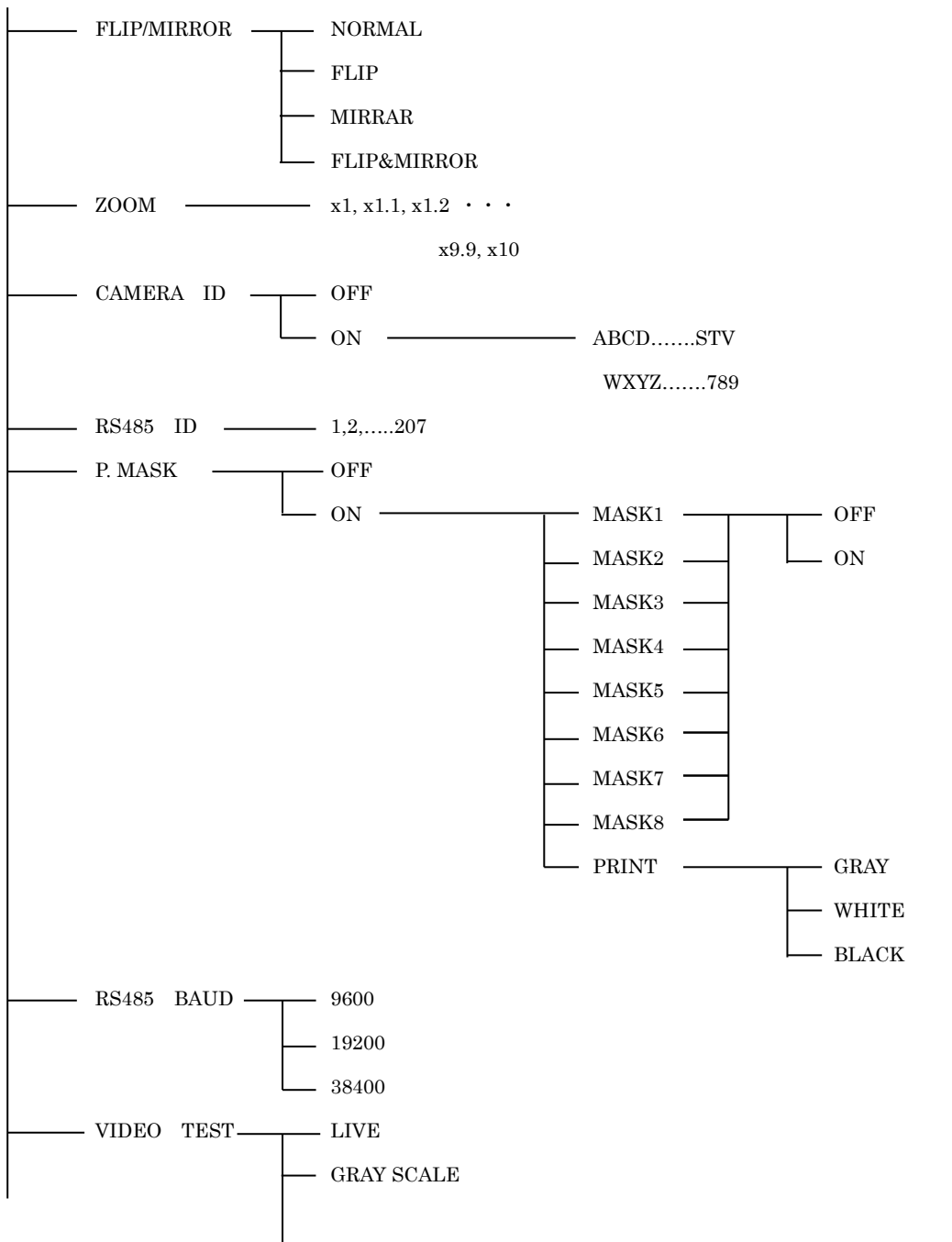
2/5



CYAN	L****I****H
HUE	
SATURATION	L****I****H
MAGENTA	L****I****H
HUE	
SATURATION	L****I****H
	L****I****H

PAGE

3/5



- COLOR BAR
- CROSS LINE

PAGE

4/5

- SDI FORMAT
 - 1080I/59.94
 - 1080P/30.00
 - 1080P/29.97
 - 720P/60.00
 - 720P/59.94
 - 720P/30.00
 - 720P/29.97
 - 1080I/50.00
 - 1080P/25.00
 - 720P/50.00
 - 720P/25.00
- SDTV FORMAT
 - NTSC-J
 - NTSC-M
- SDTV ASPECT
 - LETTER BOX
 - SIDE CUT
 - SQUEEZE
- SDTV C. BURST
 - OFF
 - ON
- IR TRIG POL
 - BRAKE
 - MAKE
- GENLOCK
 - OFF
 - ON

L****I****H

PAGE

5/5

- MODEL NAME SSC-9100
- MAIN VERSION
- FIRM VERSION
- FPGA VERSION

4-2 SPECIAL MENU-

PAGE

1/1

- WHITE DEFECT ADJUST START

5. Specification

■ Camera

Sensor	Single Panel CMOS/ RGB Bayer Array		
Total Pixel	Approx.2,600,000pixels 2270(H)x1144(V)		
Efficient Pixel	Approx.2,200,000pixels 1974(H)x1100(V)		
Pixel Size	5.0 μ m(H)x5.0 μ m(V)		
Sensor Size	2/3"		
Scanning Type	Progressive		
Sensitivity	F11 2000lx		
Min. Lux at subject	0.005lx (1/30、50IRE、+66dB)		
Horizontal Resolution	Over 900TV lines		
S/N ratio	Over 50dB (γ =1、DETAIL mode OFF)		
Lens Mount	CS		
Lens Control	4pin DC iris control		
Image Quality Control	Sensitivity Up	OFF / AUTO(S/N, STD, MOVE) / MANUAL x1, x2, x4, x6, x8, x12, x16, x24, x32, x64	
	GAIN	AUTO : AGC / HYPER-AGC MANUAL:LOW / MID / HIGH	
	Elec. Shutter	OFF, 1/50, 1/60, 1/100, 1/125, 1/250, 1/500, 1/1000, 1/2000 1/4000, 1/10000秒	
	Back Light Correction	9X5 area selection	
	Gamma Correction	0.45 / 0.75 / 1	
	Noise Reduction	OFF, LOW, HIGH	
	White Balance	ATW1 / ATW2 / AWC / MANUAL	
	Wide Dynamic Range Mode	OFF / WDR / AUTO KNEE / AUTO BLACK STRETCH	
	De Fog	OFF / LOW/MID/HIGHT	
	COLOR MATRIX	R/G/B/Ye/Cy/Mg 6 axis control	
	その他	DETAIL / CHROMA / BLACK LEVEL	
	Electronic Zoom	x1,x1.1, x1.2,x9.9, 10	
	Image Reversal	Mirror/Flip/Mirror Flip	
Privacy Mask	8 Masks in GRAY/WHITE/BLACK		
Test Pattern	Color Bar, Gray Scale、Cross Line built in		
Focus Assist	FOCUS EZ with focus indicator		
Operation	OSD		

■ Interface

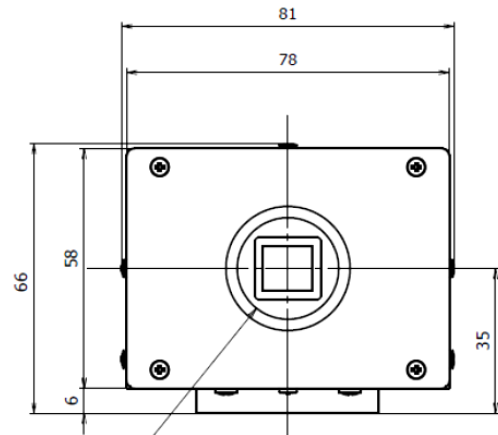
Image Output	HD-SDI (BNC)×1 Composite Video (VBS) (BNC)×1
Sync Signal Input	External Sync Input (VBS/2 sync) BNC×1
Serial Port	RS-485
Contact Input	IR cut filter switch
Video Output	HD-SDI 1080I/59.94 、 1080P/29.97 、 720P/59.94 、 720P/29.97 、 1080I/50.00 、 1080P/25.00 、 720P/50.00、 720P/25.00
	Composite Video NTSC、 PAL Down Convert Letter Box/Side Cut/Squeeze

■ Others

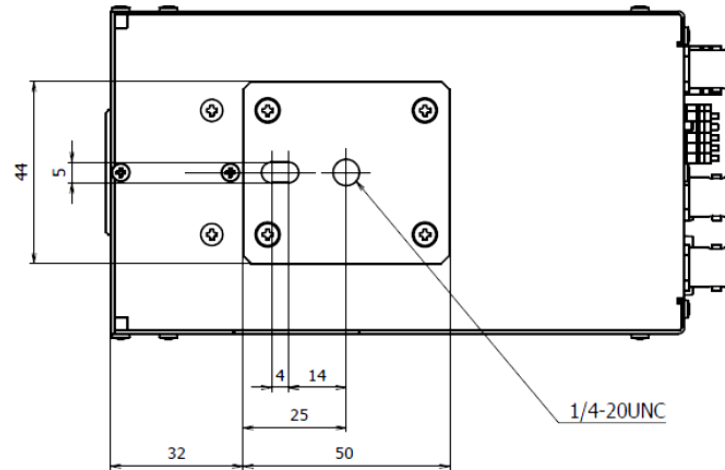
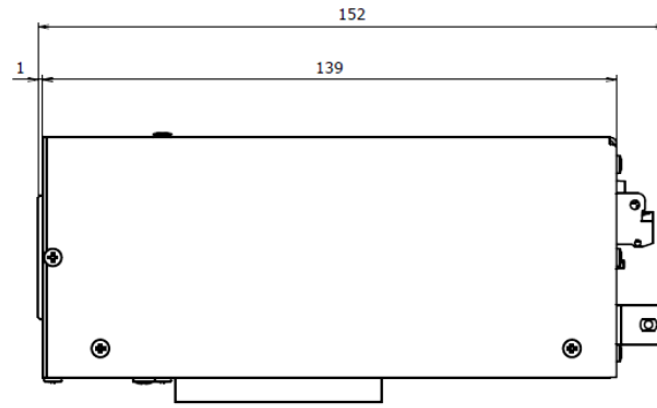
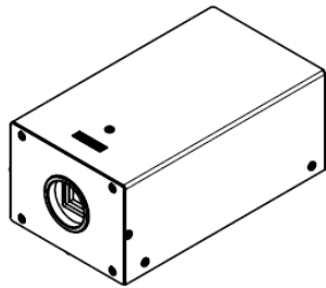
Power Supply	DC12V ±10% (Ripple 50mVp-p or less)
Power Consumption	7W
Operational Temp. /Humidity Range	0~50°C /35~90%
Storage Temp. /Humidity Range	-20~60°C/20~90%
Measurement	78.0(W)×64.0(H)×139.0(D)mm
Weight	650g

- The above specification may be changed without prior notice.

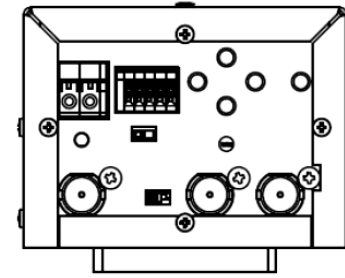
10



CSマウントネジ
口径1インチ ピッチ32山/インチ



unit : mm



WARRANTY CARD
(LIMITED WARRANTY)

IMPORTANT : TO BE VALID, THE DEALER'S RECEIPT MUST BE ATTACHED TO THIS WARRANTY CARD.

Product Name: KC1100.....

Owner's Name and Address:.....

.....

Date of Purchase:.....

All new products have been thoroughly tested and inspected prior to shipment. This product is warranted against defects in materials and workmanship for a period of one (1) year from date of purchase. If this product fails to perform to its specifications during this period, it will be repaired or replaced FREE OF CHARGE at our option.

This Warranty does not cover damage resulting from accident, misuse, neglect or importer service or maintenance. Use of unauthorized service, replacement parts or attachments will void this Warranty. Misuse includes any use of this product in other than its intended applications.

No responsibility is assumed for any special, incidental or consequential damages. No other Warranty, written, oral or implied, is assumed or authorized. The liability of KOMAMURA CORPORATION hereunder is expressly limited to a claim for a repair or replacement for the goods sold or as otherwise stated herein.

KOMAMURA CORPORATION
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KC-1100 Instruction Manual

2014/09/11

Komamura Corporation

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<http://www.falconeyenv.com/>