

**High Resolution High Sensitivity  
HDR Wide Dynamic Camera in External  
Water Proof Housing with  
High Power IR LEDS**

**INSTRUCTION MANUAL  
15-CO463VIC**



# CONTENTS

PRECAUTION.....	2
FEATURES.....	3
DIMENSION .....	3
SPECIFICATIONS.....	4
BASIC TECHNICAL DATA AND DEFAULT SETTING ....	5
OSD MENU OPERATION INSTRUCTION.....	8

# PRECAUTION

## **Do not open or modify**

Do not adjust the camera's internal circuits or power supply modules, as it may cause damage to the unit. For internal set up and repair, please consult our dealer.

## **Do not put objects inside the unit**

Do not put metal objects or flammable substance inside the camera for it may cause damage to the unit. If water or liquid gets inside of the camera please disconnect power immediately and contact with your dealer.

## **Be careful when handling the unit**

Do not drop the camera and avoid it from strong shock or vibration.

## **Install away from electric or magnetic fields**

It may interfere or distort the image when camera is installed close to electric or magnetic fields. Ex: TV, Speaker, and etc.

## **Avoid from humidity, dust and heat**

- a. Do not install the camera in smoky, dusty or steamy areas.
- b. Do not install the camera close to heat generating devices (for ex: spotlights)

**Protect the camera carefully from direct exposure to sunlight, rain, and etc.**

## **Cleaning**

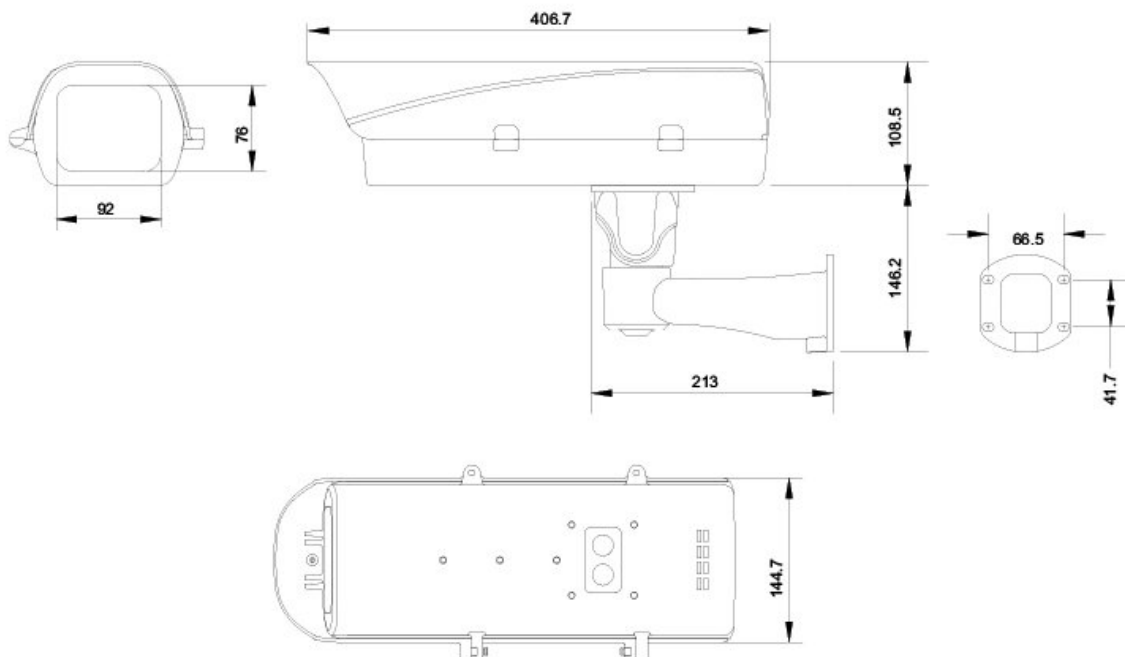
Do not touch the CCD directly. If necessary, use a soft cloth moistened with alcohol to wipe off dust.

# FEATURES

MODEL:15-CO463VIC

- Super Hi- Res. CCD with Star-Light 600TV lines (D/N)
- HDR Wide Dynamic Video Digital Signal Processor (SOC) IC
- 0 LUX with Super high power IR LEDs @100M
- AUTO / MANUAL Electronic SHUTTER speed adjustable
- High Sensitivity, Low Smear, excellent anti-blooming
- Japan original Vari-focal Lens
- On Screen Display (OSD) set-up Menu
- Motion Detection, Privacy Marking, H / V MIRROR, FREEZE, NEGATIVE, CROSS LINE
- 2X Digital Zoom with cursor moving
- Challenging High Lighting Condition / adjustable Back Light Compensation
- S/N Ratio with Auto 3D-DNR / Auto IRIS Lens Cable Management
- IR Cut Removable / ICR External Control
- Built in Video / Power Surge Protection.
- C & CS MOUNT ADJUST
- Out housing with bracket(IP66 water proof)
- Embedded Blower & Heater

# DIMENSION



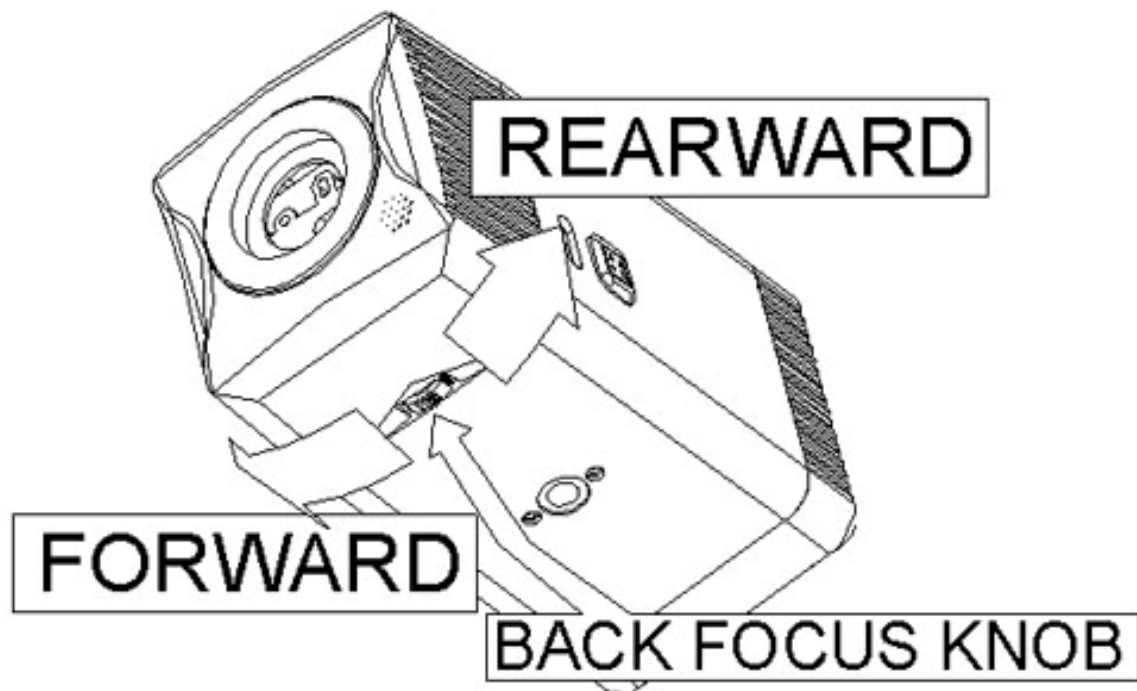
(Unit: mm)

# SPECIFICATIONS

Model No.	15-CO463VIC
Image Pick-up Device	1/3" CCD Image Sensor (Hi-Res)
Type	Colour / Monochrome
Signal System	NTSC / PAL
Total Pick-up	NTSC: 811x 507, PAL: 765 x 595
Effective Picture Elements	NTSC: 771 x 492, PAL: 753 x 582
Horizontal Resolution	600 TV lines ( D/N )
Minimum Illumination	0 Lux (IR ON)
Vertical Frequency	NTSC:60Hz / PAL:50Hz
Scanning System	2:1 interlace
S/N Ratio with Auto 3D-DNR	More than 56dB
Electronic Shutter Adjustable	NTSC: 1/60s~1/120,000s, PAL: 1/50s~1/120,000s
Wide Dynamic range	48dB(Max)
White Balance	Auto (ATW 、AWB 、FIXED 、MANUAL)/3200~10000 °K
Back Light Compensation	ON/OFF (48 Area Adjustable)
Motion Detection	YES
Auto Gain Control	ON/OFF ( 6~24dB adjustable )
IR LED	8*Super High Power LEDs/Range up to 100M
LENS	5~60mm Auto IRIS
Video Output	1 Vp-p / 75 Ohms
Gamma Characteristic	0.45 /1.0
Waterproof	IP66
Power Supply	AC24V / DC12V
Power Consumption	25 W(Max)
Embedded Heater	ON : Under 10°C/50°F;OFF :Over 28°C/82.4°F
Embedded Blower	ON : Under 40°C/104°F;OFF :Over 25°C/77°F
Storage Temperature	-30°C ~+65°C
Operating Temperature	-10°C ~+50°C
Dimension	406.7(L) x 144.7(W) x 108.5(H) mm
Weight	3.3Kg (w/packing)

# BASIC TECHNICAL DATA AND DEFAULT SETTING

## Focal adjust



- Adjusting The Back Focus of a Lens

The back focus knob is located on the bottom side of the camera. It is used for fine-tuning different back focal distance with C/CS Mount Lens by changing the distance between CCD sensor and camera's lens.

Notes :

The maxima operating length of the tuning knob is about 17.5 mm.

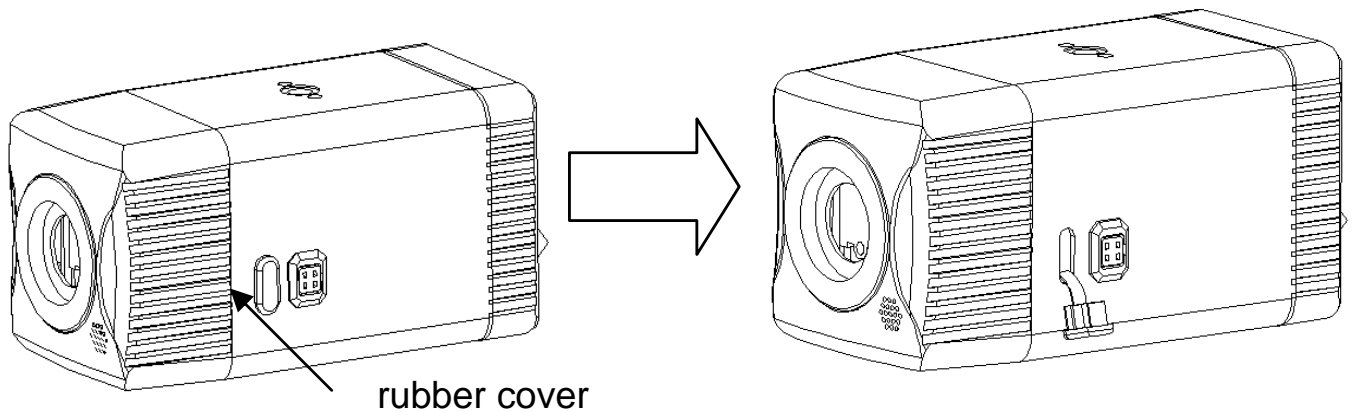
The mechanical strength of the knob could be broken by over-force. To avoid breaking, the user has to stop turning the knob when there is obstruction.

Default Setting is for CS mount type.

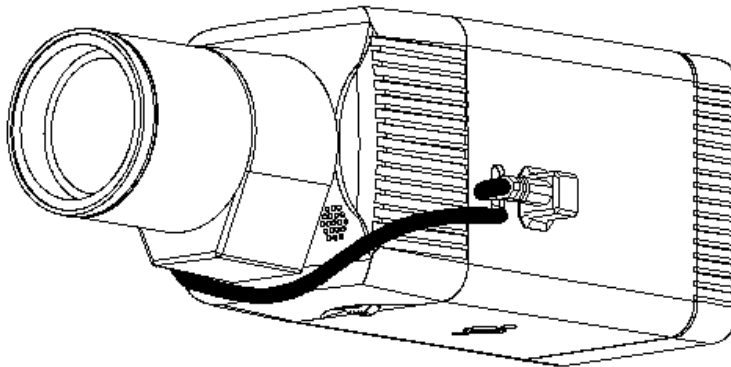
## IRIS Lens cable Instruction

There is oval hole on the side cover of camera. This is for collecting the excess iris lens cable.

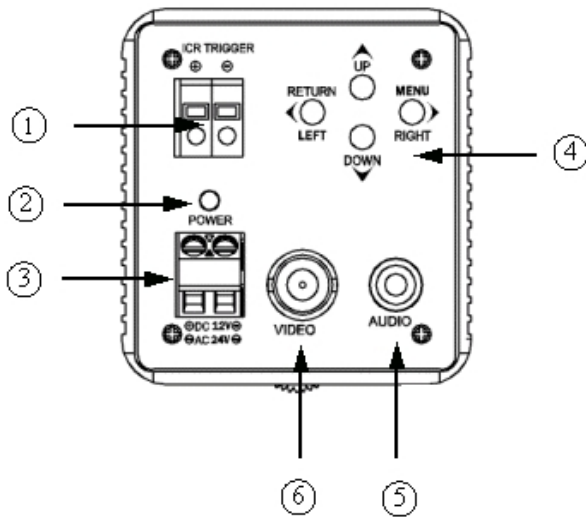
1. Pull out the rubber cover, an oval hole appears.



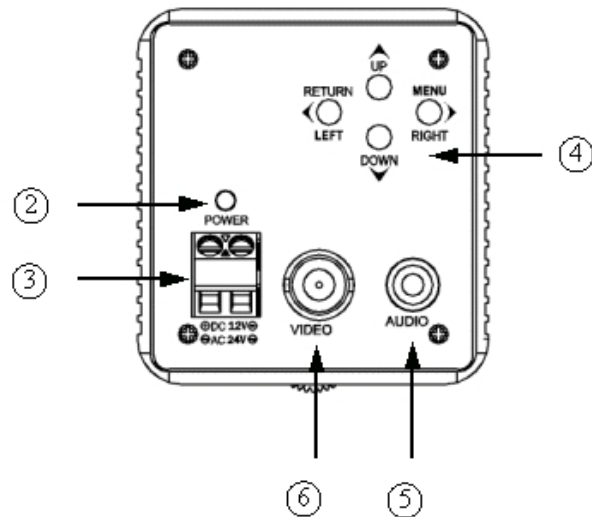
2. Connecting lens with camera, plug the lens cable into auto iris jack, and then put the excess lens cable into oval hole.



# Control key and function



15-CA453C



15-CA453

1. ICR TRIGGER (15-CA453C ONLY)  
ICR FILTER CONTROL BY EXTERNAL TRIGGER WITH NO / NC
2. POWER LED
3. POWER INPUT (DC12V , AC24V) °
4. OSD FUNCTION SWITCH °
5. AUDIO OUTPUT
6. VIDEO OUTPUT



# OSD Menu Operating Instruction

## SETUP MANU (1/3)

	I	M	A	G	E		Q	U	A	L	I	T	Y			
→	1			I	R	I	S									
	2			A	G	C	/	S	E	N	S					
	3			G	A	M	M	A								
	4			E	N	H	A	N	C	E						
	5			I	R		S	E	T	T	I	N	G			
	6			B	A	C	K	L	I	G	H	T				
	7			W	H	I	T	E		B	A	L	A	N	C	E

## SETUP MANU (2/3)

	F	U	N	C	T	I	O	N		M	E	N	U			
→	1			M	O	T	I	O	N		D	E	T	E	C	T
	2			D	I	G	I	T	A	L		Z	O	O	M	
	3			H	/	V		R	E	V	E	R	S	E		
	4			F	R	E	E	Z	E							
	5			C	R	O	S	S		L	I	N	E			
	6			M	A	S	K									
	7			P	O	S	I	/	N	E	G	A				

## SETUP MANU (3/3)

	E	X	T	R	A		S	E	T	T	I	N	G			
→	1			L	A	N	G	U	A	G	E					
	2			T	I	T	L	E								
	3			R	E	S	E	T	/	S	Y	N	C			

- # IRIS

## AES SETTING

- ## AGC/SENS

9

## GAMMA

G	A	M	M	A															
→	T	Y	P	E	1	/	T	Y	P	E	2								

TYPE 1: GAMMA= 0.45

TYPE 2: GAMMA= 1.00

## ENHANCE

E	N	H	A	N	C	E													
	H		G	A	I	N	—	—	—	—	—	—	—	—	—	—	—	—	—
	V		G	A	I	N	—	—	—	—	—	—	—	—	—	—	—	—	—

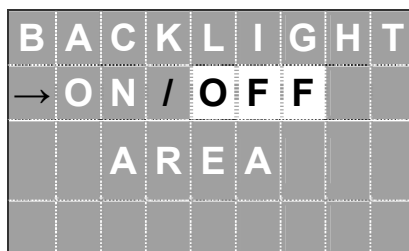
When the picture is too sharp to get the clear video output, adjust H Gain / V Gain to acquire the best image.

## IR SETTING

I	R		S	E	T	T	I	N	G										
→	O	F	F	/	E	X	T	/	A	U	T	O							

1. AUTO — Color in the daytime and B/W in the nighttime (Low Lux situation)
2. EXT— ICR filter controlled by external Infrared signal.
3. OFF— Color image all the time.

## BACK LIGHT



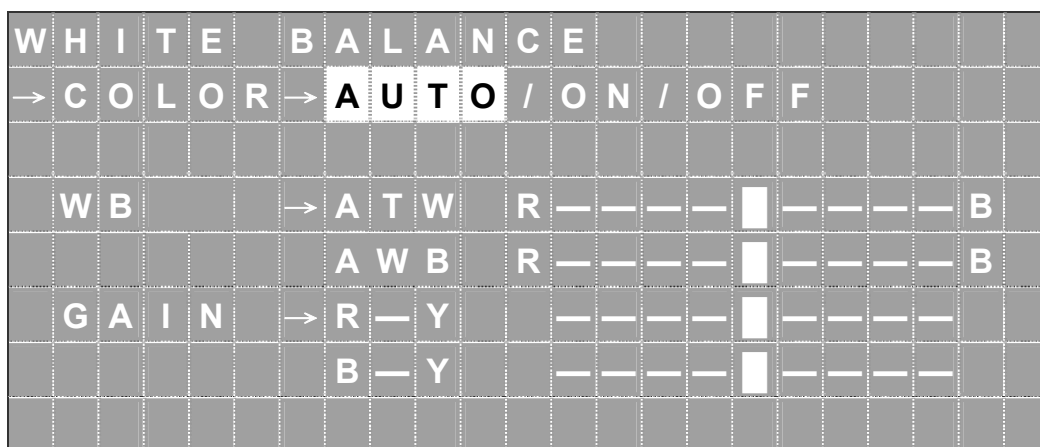
Backlight function is not working.



48 backlight areas can be selected and shown by gray marking.

1	2	3	4	5	6	7	8
9	10	11	12	13	14	15	16
17	18	19	20	21	22	23	24
25	26	27	28	29	30	31	32
33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48

## WHITE BALANCE



## MOTION DETECT

M	O	T	I	O	N		D	E	T	E	C	T								
→	O	F	F	/	O	N		6	0											
	→	A	R	E	A			3	0											
		T	I	M	E		→	1	0		S	E	C							
		S	E	N	S						L	—	—	—	—	■	—	—	—	H
		D	I	S	P	L	A	Y			O	F	F	/	O	N				

48 motion detection areas can be selected and shown by gray marking.

1	2	3	4	5	6	7	8
9	10	11	12	13	14	15	16
17	18	19	20	21	22	23	24
25	26	27	28	29	30	31	32
33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48

## DIGITAL ZOOM

D	I	G	I	T	A	L		Z	O	O	M								
→	O	F	F	/	O	N													
	H	-	P	O	S	I	T	I	O	N	=	0	4	4					
	V	-	P	O	S	I	T	I	O	N	=	0	3	1					
	D	I	S	P	L	A	Y					O	F	F	/	O	N		

## H/V REVERSE

H	/	V	R	E	V	E	R	S	E										
→	H		R	E	V	E	R	S	E	→	O	F	F	/	O	N			
	V		R	E	V	E	R	S	E	→	O	F	F	/	O	N			

## FREEZE

F	R	E	E	Z	E				
→	O	F	F	/	O	N			

## CROSS LINE

C	R	O	S	S		L	I	N	E
→	O	F	F	/	O	N			

## MASK

M	A	S	K																
→	N	O	=	1															
		O	F	F	/	O	N												
			→	H	—	S	T	A	R	T	=	0	0	0					
				H	—	E	N	D			=	3	8	3					
				V	—	S	T	A	R	T	=	0	0	0					
				V	—	E	N	D			=	2	3	9					

## POSI/NEGA

P	O	S	I	/	N	E	G	A		
→	P	O	S	I	/	N	E	G	A	

## LANGUAGE

L	A	N	G	U	A	G	E
→	E	N	G	L	I	S	H
	中	文	(	繁	體	)	

**TITLE**

T	I	T	L	E															
→																			
	!	"	#	\$	%	&	'	(	)	*	+	-	/						
	0	1	2	3	4	5	6	7	8	9	:	;	<	=	>	?			
	@	A	B	C	D	E	F	G	H	I	J	K	L	N	M	O			
	P	Q	R	S	T	U	V	W	X	Y	Z	[	\	]	^	_			
	`	a	b	c	d	e	f	g	h	i	j	k	l	n	o				
	p	q	r	s	t	u	v	w	x	y	z	{		}	~	■			
	P	O	S	I	T	I	O	N		→	O	F	F						
											U	P							
											D	O	W	N					

## RESET/SYNC

R E S E T / S Y N C .

→ R E S E T

→ O N

P H A S E

→ O F F / O N [ U N D E T E C T E D ]

- — — — — — — — — — — — — — — — +

[UNDETECTED]: No Line-Lock Signal Input.



THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES  
OPERATIONS IS SUBJECT TO THE FOLLOWING TWO  
CONDITIONS:(1) THIS DEVICE MAY NOT CAUSE HARMFUL  
INTERFERENCE AND (2) THIS DEVICE MUST ACCEPT ANY  
INTERFERENCE RECEIVED, INCLUDING INTERFERENCE  
THAT MAY CAUSE UNDESIRABLE OPERATION.



VER:20090415