HIGH PERFORMANCE **BULLET CAMERA OPERATION MANUAL**



Thank you for choosing our high quality camera. Before attempting to connect or operate, please read and follow these instructions

CAUTIONS

These servicing instructions are for use by qualified service personnel only. To reduce the risk of electric shock do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so

In USA and Canada, Use Class 2 Power Supply Only.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions;

- 1. This device may not cause harmful interference.
- 2. This device must accept any interference received, including interference that may cause undesired operation

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection 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

WARNING -

This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate

Any changes or modifications in construction of this devies which are not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment

A CAUTION A

- 1. A regulated DC12V 300mA power supply is recommended for use with this camera for the best picture and the most stable operation. An unregulated power supply can cause damage to the camera. When unregulated power supply is applied, product warranty will be out of subject.
- 2. It is recommended that the camera is used with a monitor that has a CCTV quality 75 video impedance level. If your monitor is switched to high impedance then please adjust accordingly
- 3. Do not attempt to disassemble the camera to gain access to the internal componets. Refer servicing to your dealer.
- 4. Never face the camera towards the sun or any bright or reflective light, which may cause smear on the picture and possible damage to the CCD.
- 5. Do not remove the serial sticker for the warranty service.

Correct Disposal of This Product (Waste Electrical & Electronic Equipment)

(Applicable in the European Union and other European countries with separate collection systems)

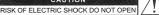
This marking shown on the product or its literature, indicate that it should not be disposed with other household wastes at the end of its working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources.

This product should not be mixed with other commercial wastes purchased this product, or their local government office, for details of where and how they can take item for environmentally safe recycling.

Business users should contact their supplier and check the terms and conditions of the purchase contract Household users should contact either the retailer where they for disposal.



CAUTION



CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER(OR BACK). NO USER.
SERVICING TO QUALIFED SERVICE PERSONNEL



This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient mangnitude to constitute a risk of electric shock to persons.



This symbol is intended to alert the user to the presence of important operating and maintenance(servicing) instruction in the literature accompanying the appliance.

IMPORTANT SAFETY INSTRUCTION

- 1) Read these instructions.
- 2) Keep these instructions. 3) Heed all warnings.
- 4) Follow all instructions
- 5) Do not use this apparatus near water.
- 6) Clean only with dry cloth.
- 7) Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- 8) Do not install near any heat sources such as radiators, heat
- registers, stoves, or other apparatus (including amplifiers) that produce heat.
- 9) Do not defeat the safety purpose of the polarized or
- grounding- type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- 10) Protect the power cord from being walked on or pinched
- particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- 11) Only use attachments/accessories specified by the manufacturer.
- 12) Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.



- 13) Unplug this apparatus during lightning storms or when unused for long periods of time.
- 14) Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

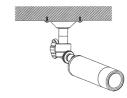
COMPONENTS

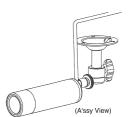
Operation

Manual

Bullet Camera Mounting Bracket කිකිකි Screw 3ea

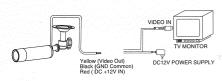
MOUNTING POSITION



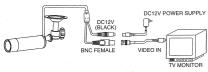


DIMENSIONS Unit(mm) 90.7 75.2 1/4"-20 UNC 16.8 Joy-Stick Control Rubbe 77.9 62.4 62.6 Joy-Stick Control Rubber Joy-Stick Control Rubber 63.2 66.4 1/4"-20UNC

CONNECTION



LEAD WIRE CONNECTION (STANDARD)

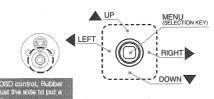


DIY CABLE CONNECTION

When you install the camera, please glue up the end of cable to keep it stable in order to protect the camera from

OSD MENU STRUCTURE

MAIN MENU	1st Sub MENU	2nd Sub MENU	3rd Sub_MENU	4th Sub MENU
		нідн	MODE	SHUT
		LUMINANCE	BRIGHTNESS	(000 ~ 255)
	AUTO	LOW	MODE	AGC,OFF
		LUMINANCE	BRIGHTNESS	x0.25,x0.50,x0.75,x1.00
		RETURN		
		MODE	SHUT+AGC	
SHUTTER/AGC	MANUAL		1/50(PAL),1/100(NTSC)	
		SHUTTER	1/60(NTSC),1/120(PAL)	
			1/250,1/500,1/1000	-
			1/2000,1/4000,1/10000	
		AGC	6,12,18,24,30,36,42,44.8	
		RETURN		
		SPEED	(000 ~ 255)	
		DELAY CNT	(000 ~ 255)	
	ATW	ATW FRAME	x0.50,x1.00,x1.50,x2.00	,
		ENVIRONMENT	INDOOR,OUTDOOR	
		RETURN		
	PUSH			
	USER1	B-GAIN	(000 ~ 255)	
		R-GAIN	(000 ~ 255)	
WHITE BAL		RETURN		
	USER2	B-GAIN	(000 ~ 255)	
		R-GAIN	(000 ~ 255)	
		RETURN		
	ANTI CR			
	MANUAL	LEVEL	27 ~ 105	
		RETURN		
	PUSH LOCK			
BACK LIGHT	OFF,BLC,HLC			
	MIRROR	OFF,ON		
	BRIGHTNESS	(000 ~ 255)		
	CONTRAST	(000 ~ 255)		
PIC ADJUST	SHARPNESS	(000 ~ 255)	and the second s	·
	HUE	(000 ~ 255)		
	GAIN	(000 ~ 255)		
	RETURN			
	ON	LUMINANCE	LOW,MID,HIGH	
		CONTRAST	LOW,MIDLOW,MID,	
ATR		CONTRAST	MIDHIGH,HIGH	
	-	RETURN -		
	OFF			
		DETECT SENS	(000 ~ 255)	
	ON	BLOCK DISP	OFF,ON,ENABLE	
			(CONTROLER)	
		MONITOR AREA	ON,OFF	
		AREA SEL	1/4, 2/4, 3/4, 4/4	
MOTION DET			ТОР	NTSC:(000 ~ 244) PAL:(000 ~ 288)
			воттом	NTSC:(000 ~ 244) PAL:(000 ~ 288)
			LEFT	NTSC:(000 ~ 474) PAL:(000 ~ 468)
			RIGHT	NTSC:(000 ~ 474) > PAL:(000 ~ 468)
		RETURN		
	OFF			
NEXT				
EXIT				
SAVE ALL				



MAIN MENU	1st Sub MENU	2nd Sub MENU	3rd Sub MENU	4th Sub-MENU
PRIVACY	ON	AREA SEL	1/4, 2/4, 3/4, 4/4	
			TOP	NTSC:(000 ~ 244) PAL:(000 ~ 288)
			воттом	NTSC:(000 ~ 244) PAL:(000 ~ 288)
			LEFT	NTSC:(000 ~ 474) PAL:(000 ~ 468)
			RIGHT	NTSC:(000 ~ 474) PAL:(000 ~ 468)
		COLOR	(1 ~ 8)	
		TRANSP	0.00, 0.50, 0.75, 1.00	
		MOSAIC	OFF,ON	
		RETURN		
	OFF			
	COLOR			
	B/W	BURST	OFF,ON	
DAY&NIGHT	AUTO	BURST	OFF,ON	
DATANIGHT		DELAY CNT	0 ~ 255	
		DAY -> NIGHT	0 ~ 255	
		NIGHT ->DAY	0 ~ 255	
	NR MODE	OFF,Y,C,Y/C		
ND	Y LEVEL	(000 ~ 015)		
NR	C LEVEL	(000 ~ 015)		
	RETURN			
CAMERA ID	ON	EDIT MODE		
		RETURN		
	OFF	<u> </u>	<u> </u>	
LANGUAGE	ENGLISH / 日本	語 / DEUTSCH / FRA	ANCAIS / Русский / PORTU	GUÊS / ESPAÑOL / 中文
CAMERA RESET			`	
BACK				
EXIT				
SAVE ALL				

Humidity

Weight

Power Consumption

SPECIFICATION

^{*}Important Note:
- Any changes made to the camera settings must be saved prior to exiting the OSD menu.
Else all changes will be discarded.

Signal Format	NTSC	PAL		
Image Device	1/3" 960H SONY EXview HAD CCD II			
Scanning System	2 : 1 Interlace			
H Resolution.	700TV Lines			
Scanning Frequency	15.734KHz(H), 59.94Hz(V)	15.625KHz(H), 50Hz(V)		
Total Pixels	1020(H) X 508(V)	1020(H) X 596(V)		
Effective Pixels	976(H) X 494(V)	976(H) X 582(V)		
Electronic Shutter	1/60 ~ 1/100,000 sec	1/50 ~ 1/100,000 sec		
S/N Ratio	More than 50dB(AGC OFF)			
Min. Illumination	0.1Lux			
Sync System	Internal			
Gamma	r= 0.45			
Video Output	1.0 Vp-p Composite (75Ω)			
OSD	Built in (Inner Key / Joystick)			
BLC	OFF/BLC/HLC			
White Balance	ATW / PUSH / USER1 / USER2 / ANTI CR / MANUAL / PUSH-LOCK			
2DNR	OFF / ON (Level adjustable)			
ATR	OFF / ON (Level adjustable)			
Function	MIRROR / BRIGHTNESS / CONTRAST / SHARPNESS / HUE / GAIN			
Privacy Masking	4 Zones			
Motion Detection	4 Zones			
Day & Night	Digital D&N (Option)			
Lens	Board Lens, Pinhole Lens			
Language	ENGLISH / JAPANESE / GERMAN / FRENCH / RUSSIAN / PORTUGUESE / SPANISH / CHANESI			
Operating Temperature	14°F~122°F (-10°C~+50°C)			
Storage Temperature	-4°F~140°F (-20°G~+60°C)			

Specifications and designs are subject to change for improving the functionality of this product without notice.

Less than 80%

DC12V ±10% Max. 83mA

Approx. 68g

23.0Ø x 75.2mm