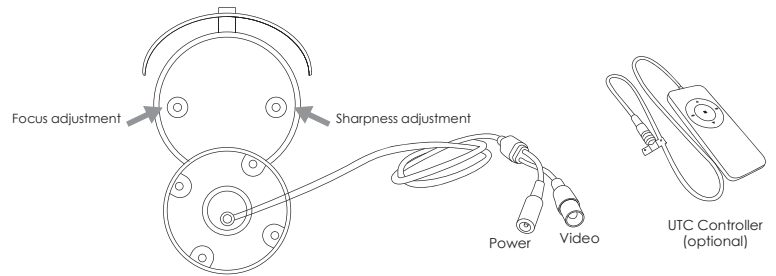


## BVO409F-XA 700 TVL IR Array Varifocal Bullet Camera



## Product Wiring Diagram



## MENU OPERATION

01



### Menu Operation

Connect UTC controller to the video end of the cable to enable remote OSD control  
1. Press[SET]

The Menu screen appears on the monitor.  
Check the current settings on the menu.

2. Use [UP] or [DOWN] button to select the [EXIT] then use [LEFT] or [RIGHT] button to select a mode.  
-EXIT: Exit the setup menu.

## EXPOSURE SETTINGS

02



ALC	BRIGHTNESS	0~20
	SHUTTER	INDOOR, OUTDOOR, 1/100.1/120 ~ 1/120K
	FLK	OFF / ON
ELC	BRIGHTNESS	0~20
	SHUTTER	AUTO, 1/50, 1/60 ~ 1/120K
	FLK	OFF / ON
	AGC	OFF / ON (1~20)

## DAY & NIGHT SETTINGS

03



AUTO	AGC THRS	0~20
	AGC MARGIN	0~20
	D/N DELAY	0~15 sec
	B/W BURST	OFF / ON
	SMART IR	ANTI-SAT: off-20, SAT AREA: 0~20
NIGHT	B/W BURST	OFF / ON
	SMART IR	ANTI-SAT: off-20, SAT AREA: 0~20
	EXTERN S/W	LOW / HIGH
	D/N DELAY	0~15 sec
	B/W BURST	OFF / ON
EXTERN	SMART IR	ANTI-SAT: off-20, SAT AREA: 0~20
	CDS D->N	0~20
	CDS N->D	0~20
	D/N DELAY	0~15 sec
	B/W BURST	OFF / ON
CDS	SMART IR	ANTI-SAT: off-20, SAT AREA: 0~20

## WHITE BALANCE SETTINGS

04



ATW	
PUSH	PUSHING
MANUAL	RED (0~20), BLUE (0~20)

## DISPLAY ADJUSTMENT SETTINGS

05



GAMMA	0.35 ~ 0.70
CHROMA	0~20
SHARPNESS	0~20
DE-BACK NOISE	0~10
SHADING	0~20
RESOLUTION	0~15
WARM COLOR	0~20
COOL COLOR	0~20

## IMAGE SETTINGS

06



BACKLIGHT	OFF	Level(Low/Middle/High), Display (Off/On), Position (Top/Bottom/Left/Right)
	BLC	Level(Low/Middle/High)
	HLC	Level(Low/Middle/High)
CONTRAST	OFF	
	WDR	Auto, Manual, Level (Low, Middle, High)
	DEFOG	Auto, Manual, Level (Low, Middle, High)
POSI/NEGA	POSI, NEGA	
H-MIRROR	OFF	
PRIVACY	ON	Mask LV (12 Color), Area No (1~8), Display (Off/On), Position (Top/Bottom/Left/Right)

## DNR SETTINGS

07



DNR	OFF / LOW / MIDDLE / HIGH
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## MOTION DETECTION SETTINGS

08



OFF / ON	SENSITIVITY	0~30
	AREA NO.	1 ~ 4
	AREA USE	OFF / ON
	POSITION	TOP/BOTTOM/LEFT/RIGHT

## SYSTEM SETTINGS

09



CAM TITLE	OFF / ON	
CAM ID	0 ~ 255	
ID DISPLAY	OFF / ON	
SYNC	INT / L/L(AC Power)	
BAUDRATE	2400/4800/9600/57600/115200	
PROTOCOL	PELCO-D / PELCO-P	
LANGUAGE	ENGLISH / CHINESE	
SPECIAL	DEFECT DETECTION	
	FONT COLOR	1~8
VERSION		

## Specifications

Model	BVO409F-XA
Video Standard	NTSC / PAL
Image Sensor	1/3" Sony Super-HAD II CCD
Total Picture Elements	1020(H) X 508(V) / 1020(H) X 596(V)
Effective Picture Elements	976(H) X 494(V) / 976(H) X 582(V)
Synchronizing System	Internal, AC Line Lock
Horizontal Resolution	Color: More than 700 TVL B/W: More than 800 TVL
Minimum Illumination	Color: 0.05 Lux@F1.2(50IRE) / 0.06 Lux(15IRE) B/W: 0.01 Lux@F1.2(50IRE) / 0.006 Lux(15IRE)
IR LED	3 Arrays
IR LED Effective Range	Up to 60 - 80 Meters
Video S/N Ratio	52dB
OSD Language	English / Simplified Chinese / Traditional Chinese
Day / Night Mode	Auto / Day / Night / Ext / CDS
Highlight Compensation (HLC)	Low / Middle / High
High Speed Shutter	Indoor/Outdoor (1/60(1/50) ~ 1/120Ksec)
Flickerless Mode	OFF / ON
WDR	AUTO / MANUAL (Low / Middle / High)
Auto Gain Control (AGC)	Level Setting
ALC (Auto Level Control)	AI Lens (DC)
Defog	AUTO / MANUAL (Low / Middle / High)
Digital Noise Reduction (DNR)	Off / Low / Middle / High (Adaptive 2D)
Gamma	0.35 ~ 0.70
White Balance	ATW / Push / Manual
Camera No. / ID	Off / On (Max. 255 NO, Bea ID/Line)
Motion Detection	4 zones (On/Off, Position, Sensitivity)
Privacy Masking	8 zones (On/Off, Color, Position)
Lens	5-15 / 9-22 mm
Protection Rating	IP66
Video Output	VBS 1.0V p-p (75ohm Terminated)
Power Input	DC12V ± 10%
Power Consumption	Less than 1.2W
Operating Temperature	-10°C ~ +50°C
Operating Humidity	Less than 90%
Shell Material	Metal
Dimension (mm)	225 x 101 x 15
Gross Weight (g)	1300

## Note

- Please use the connector of the camera to a DC 12V regulated power supply.
- The tolerance of this unit is DC 12V ± 10 %
- Over the maximum DC 12V power input will damage the video output connector (VIDEO OUT)

**CAUTION**  
RISK OF ELECTRIC SHOCK

**Caution:**  
To reduce the risk of electric shock, do not expose this apparatus to rain or moisture. Only operate this apparatus from the type of power source indicated on the label. The company shall not be liable for any damages arising out of any improper use, even if we have been advised of the possibility of such damages.