





**D/N ATR 700TVL IR CAMERA
CMR7082/7084/7088 N/P 3.6/6**

**D/N ATR 700TVL VARI-FOCAL IR CAMERA
CMR7082X3.6 N/P**

INSTRUCTION MANUAL

IMPORTANT SAFEGUARDS

	<p>CAUTION</p> <p>RISK OF ELECTRIC SHOCK DO NOT OPEN</p>	
<p>CAUTION : TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK) NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.</p>		

GRAPHIC SYMBOL EXPLANATION

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the unit.



<p>CAUTION</p> <p>RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE.</p> <p>DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS</p>
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CAUTION

- ⊗ **Do not drop or strike this equipment.**

Sensitive electronics inside are vulnerable to excessive shock.

- ⊗ **Do not install the equipment near any naked flames or heat sources.**

Excessive heat could damage this unit.

- ⊗ **Do not expose this unit to rain or excessive moisture, avoid smoke and dust.**

Please the camera in an environmental housing for protection. If the camera gets wet, unplug it and have it checked by qualified service personnel.

- ⊗ **Do not cover cloth or to install this unit in poorly ventilated places.**

This may lead to overheating.

- ⊗ **Do not continue to operate if there appears to be fault.**

If the unit ceases to function, contact qualified service personnel for help.

- ⊗ **Do not touch the power connection with wet hands.**

Risk of short circuit or electric shock.

- ⊗ **Do not damage the power cord or leave it under pressure.**

Risk of fire or shock circuit.

CONGRATULATIONS

Thank you for purchasing this D/N ATR 700TVL (Vari-Focal)IR Camera. You now own one of the many fine CCTV products we manufactured. This product has been carefully inspected under rigid quality control and should reach you in perfect condition. With reasonable care, it will provide years of reliable performance.

We recommend that you read this installation and operation manual thoroughly before installing and operation your new system.

Here you will find all the information you need to set up and use the system. If any questions are not answered in the manual, please contact your dealer.

Before proceeding, please read and observe all instructions and warnings contained in this manual. Retain this manual with the original bill of sale for future reference and, if necessary, warranty service.

When unpacking your new camera, check for missing or damaged items. If any item is missing, or if damage is evident, **DO NOT INSTALL OR OPERATE THIS PRODUCT**. Contact your dealer for assistance.

WARRANTY INFORMATION

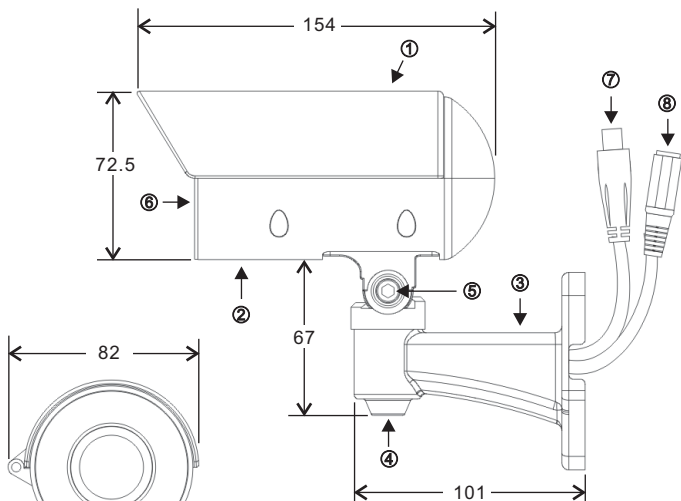
Please complete the following product purchase information. The factory will requests this information when contacted for technical support, or warranty repair. It is also valuable in case of loss or theft.

Purchase Date : _____
Serial Number : _____
Model Number : _____

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PART DESCRIPTION & DIMENSION



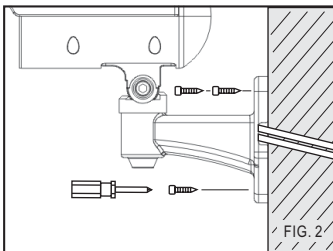
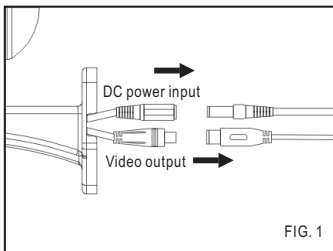
Unit: mm

- ① TOP COVER
- ② BOTTOM CHASSIS
- ③ BRACKET
- ④ PAN ADJUSTMENT SCREW
- ⑤ TILT ADJUSTMENT SCREW
- ⑥ WINDOW
- ⑦ VIDEO OUTPUT JACK (CMR7082)
- ⑧ DC POWER INPUT JACK (DC12V 10%, CMR7082)

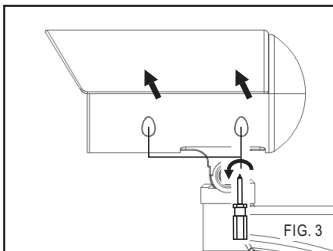
INSTALLATION

1. CMR7082

- 1-1. Take out the camera from the inner box first. Plug the video cable and power cable to video output jack and DC power input jack of the camera (FIG.1). Then fix bracket to the wall(FIG.2).

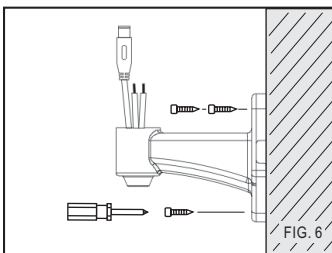
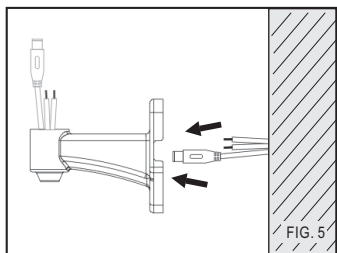
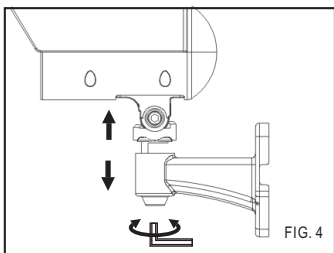


- 1-2. Loosen the screws of top cover with screw driver(FIG.3).

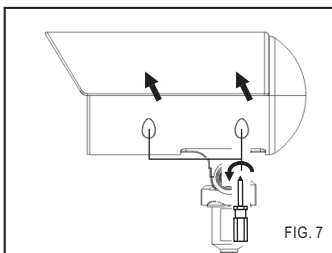


2. CMR7084/8

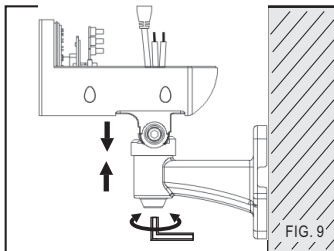
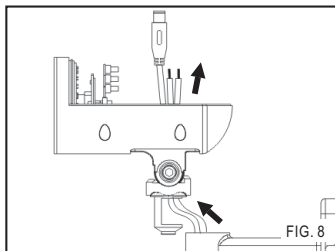
- 2-1. Take out the camera from the inner box first. Loosen the pan adjustment screw with hexagon screw driver. Then, separated the bracket from the camera body(FIG.4). Put the power cable and video cable through the bracket and then fix it to the wall(FIG.5&FIG.6).



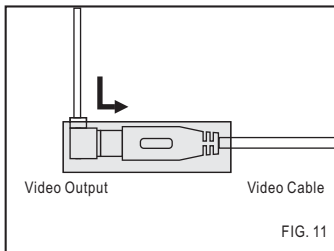
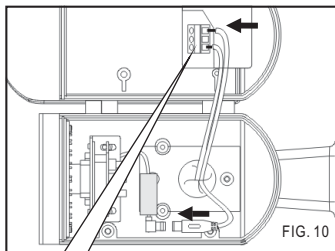
2-2. Open the top cover with screw driver(FIG.7).



2-3. Next, Put the power cable and video cable through the bottom chassis and rubble(FIG.8) and then fix the camera body on the bracket(FIG.9).

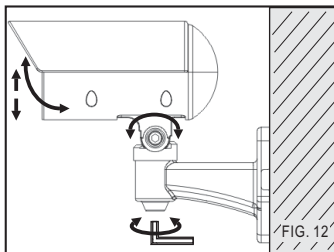


2-4. Plug and fix the power cable to the terminal and plug the video cable to video output of the camera(FIG. 10). For the safety reason, when plug video cable to video output please use the cable tubing to cover the bare part to avoid danger of electric shock or electric leakage(FIG. 10&FIG. 11).

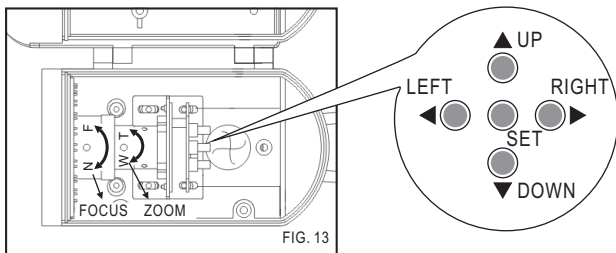


Neutral Earth Live		<p>Note : When using two-cord power cable, please connect them to "Live" and "Neutral".</p>
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3. Loosen the pan and tilt adjustment screw on the bracket to turn the camera body to the desired angle and then tighten the screws(FIG. 12).



4. First, adjust the lens on focus and zoom to form the optimal video image after that tighten the screws(FIG.13). Then adjust the OSD menu to form the optimal image. Please refer to page7~10.



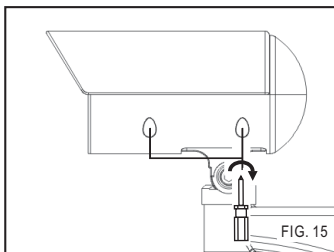
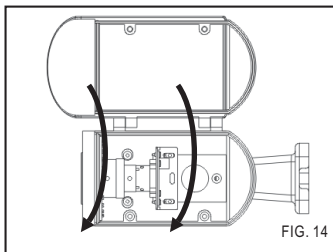
4-1. USER OSD SETTING

Setting switches and Functions.

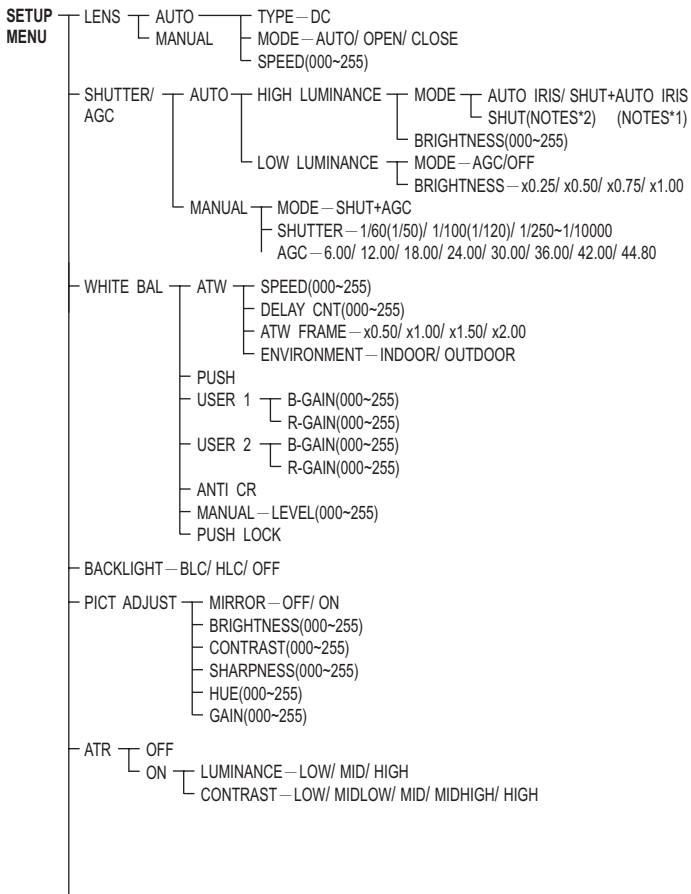
- A. ▲ (UP) : Press to move the cursor upwards or to select items.
- B. ◀ (LEFT) : Press to move the cursor to the left and to select or adjust the parameters of the selected item.
The parameters changes each time this button is pressed.

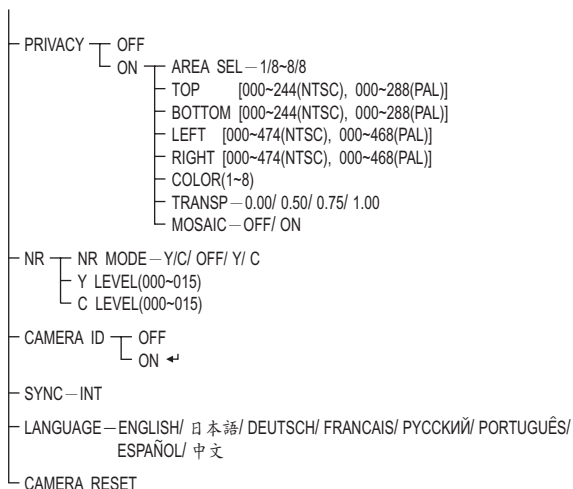
- C. ► (RIGHT) : Press to move the cursor to the right and select or adjust the parameters of the selected item. The parameters changes each time this button is pressed.
- D. ▼ (DOWN) : Press to move the cursor downwards or to select items.
- E. SET : Executes selections and displays a submenu for an item with the ◀◀ mark.

5. Replace the top cover and tighten the screws(FIG.14&FIG.15).



CONFIGURATION OF THE MENU





NOTES

- *1: The LENS option appear on the SETUP MENU menu, and then set the LENS mode to AUTO on the SETUP MENU menu.
- *2: The LENS option disappear on the SETUP MENU menu or set the LENS mode to MANUAL on the SETUP MENU menu.

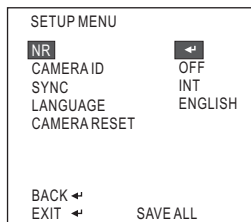
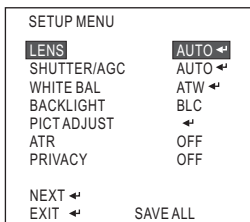
SETTING MENU AND FUNCTION

TO Open and Exit the Menu screen

1. Press "SET" button.

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

2. Push ▲ or ▼ button to select the options then use ◀ or ▶ button to select a mode.
 - NEXT: To the next setup menu.
 - BACK: Return to the previous.
 - RETURN: Return to the previous.
 - SAVE ALL: Used to save the various setting of the internal OSD menu in the EEPROM together.
 - EXIT: Exit the setup menu.



Setting of shutter speed of AUTO IRIS mode

Please set-up proper shutter speed for AUTO IRIS mode as below:

SHUTTER/AGC: AUTO[SETUP MENU]→ SET→ MODE: AUTO IRIS[AUTO SETUP]→ RETURN→ SHUTTER/AGC: MANUAL[SETUP MENU]→ SET→ SHUTTER: 1/60(1/50) or 1/100(1/120) or 1/250.....[MANUAL SETUP]→ RETURN→ SHUTTER/AGC: AUTO[SETUP MENU]→ SAVE ALL → SET → EXIT

NOTES

1. Without LENS option in the CMR7082/7084/7088N/P3.6/6.
2. Only DC mode on the TYPE option. Because a DC auto iris lens is used with the CMR7082X3.6N/P.
3. Please select AUTO mode on the SHUTTER/AGC option. If you select MANUAL mode, the over exposure may occur.

SPECIFICATIONS

D/N ATR 700TVL IR CAMERA								
Model No.		CMR7082N/P3.6	CMR7082N/P6	CMR7084N/P3.6	CMR7084N/P6	CMR7088N/P3.6	CMR7088N/P6	
Lens	Focal Length	3.6mm	6mm	3.6mm	6mm	3.6mm	6mm	
	Iris	F2.0	F1.8	F2.0	F1.8	F2.0	F1.8	
	Angle of view	H	73	44.5	73	44.5	73	44.5
		V	54.5	33.1	54.5	33.1	54.5	33.1
	D	92	56	92	56	92	56	
Power Input Voltage		DC12V (10%)		AC24V (10%)		AC100~240V		
System		NTSC or PAL						
Pick Up Element		1/3" Exview HAD CCD Sensor						
Effective Pixels		976(H) x 494(V) [NTSC] 976(H) x 582(V) [PAL]						
Chip Size		5.58mm(H) x 4.67mm(V)						
Horizontal & Vertical Sync. Frequency		15.734 KHz / 59.94Hz [NTSC] 15.625 KHz / 50Hz [PAL]						
Scanning System		2:1 Interlace						
Menu Control		OSD Control						
Sync. Mode		Internal						
Resolution		Color: 700TV Lines, Mono: 750TV Lines						
Minimum Illumination		0.2Lux/F1.8, 0Lux(IR On)						
S/N Ratio		More Than 50dB (AGC-OFF)						
Auto Gain Control		AUTO / MANUAL						
White Balance		ATW / PUSH / USER1 / USER2 / ANTI CR / MANUAL / PUSH LOCK						
Shutter	Auto	1/60(1/50)S ~ 1/100,000S						
	Manual	1/60(1/50)S, 1/100(1/120)S, 1/250S, 1/500S, 1/1,000S, 1/2,000S, 1/4,000S, 1/10,000S						
Adaptive Tone Reproduction	Luminance	LOW / MID / HIGH						
	Contrast	LOW / MIDLOW / MID / MIDHIGH / HIGH						
Back Light Compensation		BLC / HLC(High Light Compensation) / OFF						
Noise Reduction		Y / C / Y/C / OFF						
Picture Adjust		MIRROR / BRIGHTNESS / CONTRAST / SHARPNESS / HUE / GAIN						
Privacy Masking		ON / OFF						
Privacy Masking Zone		8 Zones						
OSD Language		ENGLISH/JAPANESE/GERMANS/FRENCH/RUSSIAN/PORTUGUESE/SPANISH/SIMPLY CHINESE						
Video Output		CVBS 1.0Vp-p, 75ohm						
Gamma Characteristic		$\gamma = 0.45$						
Power Consumption		7.8W			11W			
Operating Temperature		-10°C ~ +50°C (14°F ~ 122°F)						
IP Rating		IP66						
Window		ϕ 65 Heat Resistant Glass						
Infrared LED	Peak Wavelength	850nm						
	Beam Spread	30						
	Radiant Distance	30M						
Dimension		Body:82mm(W) x 72.5mm(H) x 154mm(D), Bracket: 101mm(L)						
Weight		530g			540g			

Design and specifications are subject to change without notice.

D/N ATR 700TVL VARI-FOCAL IR CAMERA			
Model No.		CMR7082X3.6N/P	
Lens	Focal Length		3.3 ~ 12mm
	Iris		F1.4
	Angle of view	H	89.8 ~ 23.9
		V	63.6 ~ 17.9
D		125.7 ~ 29.9	
Power Input Voltage		DC12V (10%)	
System		NTSC or PAL	
Pick Up Element		1/3" Exview HAD CCD Sensor	
Effective Pixels		976(H) x 494(V) [NTSC] 976(H) x 582(V) [PAL]	
Chip Size		5.58mm(H) x 4.67mm(V)	
Horizontal & Vertical Sync. Frequency		15.734 KHz / 59.94Hz [NTSC] 15.625 KHz / 50Hz [PAL]	
Scanning System		2:1 Interlace	
Menu Control		OSD Control	
Sync. Mode		Internal	
Infrared Cut Filter		Auto Selectable, Automatic Switch From Color Mode to Monochrome	
Resolution		Color: 700TV Lines, Mono: 750TV Lines	
Minimum Illumination	Color	0.045Lux / F1.4	
	Mono	0.009Lux / F1.4	
	IR On	0Lux	
S/N Ratio		More Than 50dB (AGC-OFF)	
Auto Gain Control		AUTO / MANUAL	
White Balance		ATW / PUSH / USER1 / USER2 / ANTI CR / MANUAL / PUSH LOCK	
Shutter	Auto	1/60(1/50)S ~ 1/100,000S	
	Manual	1/60(1/50)S, 1/100(1/120)S, 1/250S, 1/500S, 1/1,000S, 1/2,000S, 1/4,000S, 1/10,000S	
Adaptive Tone	Luminance	LOW / MID / HIGH	
Reproduction	Contrast	LOW / MIDLOW / MID / MIDHIGH / HIGH	
Back Light Compensation		BLC / HLC(High Light Compensation) / OFF	
Noise Reduction		Y / C / Y/C / OFF	
Picture Adjust		MIRROR / BRIGHTNESS / CONTRAST / SHARPNESS / HUE / GAIN	
Privacy Masking		ON / OFF	
Privacy Masking Zone		8 Zones	
OSD Language		ENGLISH/JAPANESE/GERMANS/FRENCH/RUSSIAN/PORTUGUESE/SPANISH/SIMPLY CHINESE	
Video Output		CVBS 1.0Vp-p, 75ohm	
Gamma Characteristic		$\gamma=0.45$	
Power Consumption		6.8W	
Operating Temperature		-10°C ~ +50°C (14°F ~ 122°F)	
IP Rating		IP66	
Window		ϕ 65 Heat Resistant Glass	
Infrared LED	Peak Wavelength	850nm	
	Beam Spread	30	
	Radiant Distance	30M	
Dimension		Body:82mm(W) x 72.5mm(H) x 154mm(D), Bracket: 101mm(L)	
Weight		550g	

Design and specifications are subject to change without notice.



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