

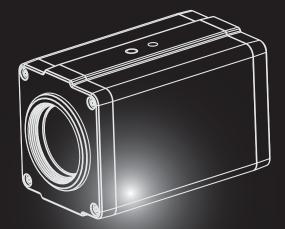
eneo* is a registered trademark of VIDEOR E. Hartig GmbH Exclusive distribution through specialised trade channels only.

VIDEOR E. Hartig GmbH Carl-Zeiss-Straße 8 63322 Rödermark/Germany Tel. +49 (0) 6074 / 888-0 Fax +49 (0) 6074 / 888-100 www.videor.com www.eneo-security.com

Technical changes reserved © Copyright by VIDEOR E. Hartig GmbH Version 08/2024

MPC-52A0030M0B

1/2,8" HD Camera, 1920x1080, 30x Optical Zoom(4,6-136,0 mm) & 32x Digital Zoom, T-WDR, HD-SDI, EX-SDI, TVI, CVBS



- Before attempting to connect or operate this product, please read these instructions carefully and save this manual for future use.
- The design and specifications are subject to change without prior notice to improve product's quality.



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

REFER SERVICING TO QUALIFIED SERVICE PERSONNEL



The lightning flash with an 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 product.

FCC WARING - This equipment may generate or use radio frequency energy. Changes or modifications to this equipment may cause harmful interference unless the modifications are expressly approved in the instruction manual. The user could lose the authority to operate this equipment if an unauthorized change or modification is made.

REGULATORY INFORMATION : FCC Part 15

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.

A suitable conduit entries, knock-outs or glands shall be provided in the cable entries of this product in the end use. Holes in metal, through which insulated wires pass, shall have smooth well rounded surfaces or shall be provided with brushings.

WARNING - Do not install this equipment in a confined space such as a bookcase or similar unit.

WARNING - Wiring methods shall be in accordance with the National Electric Code, ANSI/NFPA 70.

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 measures.

WARNING - To reduce a risk of fire or electric shock, do not expose this product to rain or moisture.

CAUTION - This installation should be made by a qualified service personrel and should conform to all local codes.

CAUTION - To avoid electrocal shock, do not open the cabinet. Refer servicing to qualified personnel only.

CAUTION - The apparatus should not be exposed to water (dripping or splashing) and no objects filled with liquids, such as vases, should be placed on the apparatus.



Disposal of your old appliance

1. When this crossed-out wheeled bin symbol is attached to a product it means the product is covered by the European Directive 2002/96/EC

- All electrical and electronic products should be disposed of separately from the municipal waste stream via designated collection facilities appointed by the government or the local authorities
- 3. The correct disposal of your old appliance will help prevent potential negative consequences for the environment and human health
- 4. For more detailed information about disposal of your old appliance, please contact your city office, waste disposal service or the shop where you purchased the product.

To disconnect power from the mains, pull out the main cord plug. When installing the product, ensure that the plug is easily accessible.

IMPORTANT SAFETY INSTRUCTIONS

- Read these instructions All these safety and operating instructions should be read before the product is operated.
- 2. Keep these instructions The safety, operating and user instructions should be retained for future reference.
- **3. Heed all warnings -** All warnings on the product and in the operating instructions should be adhered to.
- **4. Follow all instructions -** All operating and user instructions should be followed.
- **5.** Do not use this apparatus near water For example : near a bath tub, wash bowl, kitchen sink, laundry tub, in a wet basement, near a swimming pool, etc.
- **6. Clean only with dry cloth** Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners.

7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions. -Slots and openings in the cabinet are provided for ventilation, to ensure reliable operation of the product, and to protect it from overheating. The openings should never be blocked by placing the product on a bed, sofa, rug or other similar surface. This product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided and the manufacturer's instructions have been adhered to.

8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.

- Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- 10. Only use attachments/accessories specified by the manufacturer.



11. Unplug this apparatus during lightning storms or when unused for long periods of time.

IMPORTANT SAFETY INSTRUCTIONS

12. 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.



FEATURES	7P	
PACKAGE COMPONENTS	8P	
SYSTEM CONFIGURATION	9P	SP
PART NAMES AND FUNCTIONS	10P	DF
CONNECTIONS	12P	TR
EXTERNAL DEVICE CONNECTIONS	13P	
VIDEO OUT	14P	
MENU OPERATION	15P	
MAIN MENU	16P	
FOCUS	17P	
EXPOSURE	18P	
WHITE BALANCE	21P	
IMAGE	22P	
INTELLIGENCE	24P	

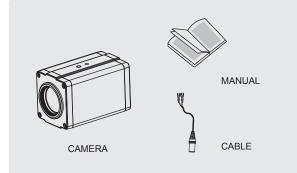
SPECIAL FUNCTION	26P
DISPLAY	28P
SPECIFICATION	30P
DRAWING	34P
TROUBLESHOOTING	35P

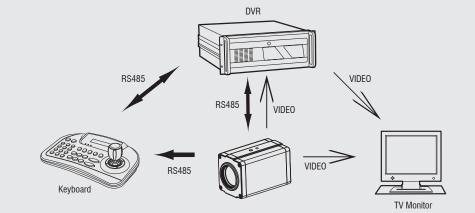
Features

- 1/2.8" Sony CMOS Sensor
- HD-SDI, EX-SDI, TVI, CVBS
- 30x Optical Zoom(4.6 mm ~ 136.0 mm) & x32 Digital Zoom
- Wide Dynamic Range
- Digital Noise Reduction
- Digital Slow Shutter
- Digital Image Stabilization
- Defog Function
- High Light Compensation
- ACE(Digital WDR)
- Privacy Mask Function
- Motion Detection



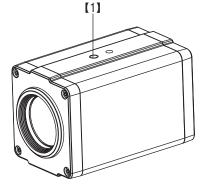
SYSTEM CONFIGURATION



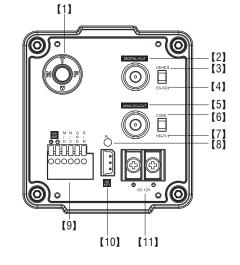


PART NAMES AND FUNCTIONS

PART NAMES AND FUNCTIONS

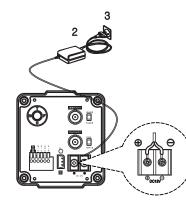


[1] Camera installation bracket The braket can be fixed at the top or bottom of the camera.



[1]OSD / Zoom / Focus control 2 DIGITAL-OUT 3 HD-SDI 4 EX-SDI 5 ANALOG-OUT 6 CVBS (7)HD-TVI [8] Power LED [9]Control Terminal 1: RS-485 (+) 2: RS-485 (-) 3: Motion Detection Out 4: No Connection 5: Ground 6: Day&Night Input (Low : Night, High : Day) [10]AD Key 1: GND 2: AD-key 3: GND [11]Power : DC12V

EXTERNAL DEVICE CONNECTIONS



Basic connection

The peripheral devices (DVR, monitor, lens, etc), DC adaptor and cables are not supplied.

1. Connecting the monitor.

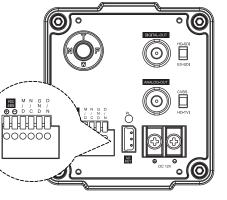
Make the video signal connection between the camera and the monitor or time lapse monitor or DVR.

2. Use a commercially available DC12V adaptor.

Connect an DC 12V power source to the DC 12V input terminal on the back of the camera.

3. Insert the plug of this power cord into a wall outlet.

The POWER indicator will light. Adjust the picture on the monitor using the Brightness and Contrast controls etc.



RS-485 COMMUNICATION

Connect to an external controller of RS-485 format.

Motion Detection Out

When the motion detection function is working. DC3.3V is outputed to OUT pin and GND pin.

Day & Night input

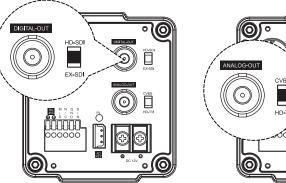
Day/Night mode of the camera can be switched by signal from an external device. To use this function, <DAY&NIGHT> setting of the camera should be set to the <EXT>.

Note : Use a relay unit if the voltage or current of the connected device exceeds the ratings.



To monitor's Video Input or Camera Input





DIGITAL OUT Select HD-SDI and EX-SDI video out by switch setting. **ANALOG OUT** Select CVBS and HD-TVI video out by switch setting. This camera utilizes an on-screen user MENU. To set items on the menu, use the following buttons on the side panel.

\mathbf{O} **M** 1 0 (\odot) \odot 200000 10).

Tele(Up) button : Zoom in, Tele (Moves the cursor upwards. Use this button to select an item or adjust the parameters.)

MENU OPERATION

- Wide(Down) button : Zoom out, Wide (Moves the cursor downwards. Use this button to select an item or adjust the parameters.)
- Far(Right) button : Adjust focus in Manual Mode (Moves the cursor to the right. Use this button to select or adjust the parameters of the selected item. The parameter changes each time this button is pressed.)
- Near(Left) button : Adjust focus in Manual Mode Moves the cursor to the left. Use this button to select or adjust the parameters of the selected item. The parameter changes each time this button is pressed.)

O Set button : Executes selections and displays a submenu for an item with the I mark.



Camera menu is subject to change without prior notice to upgrade and quality increase and we may use slip sheet for the change.

Please check the camera version and the slip sheet if the camera menu and this manual menu is not matched.

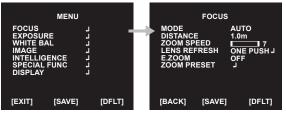
MAIN MENU

	MENU	
FOCUS EXPOSUI WHITE BA IMAGE INTELLIG SPECIAL DISPLAY	AL ENCE	
[EXIT]	[SAVE]	[DFLT]

Functions can be setup using "Menu Key Command" of Visca protocol. The menu consists of the "Main Menu" and "Sub Menu". The main menu is displayed where 7 camera functions can be selected. To the push of each main menu selection, the sub-menu is displayed

If you want save the menu, select [SAVE]. If you want not save the menu, select [EXIT] (After select , Power off -> on) If you want default the menu, select [DFLT]

FOCUS



MODE : Select auto focus mode

- ► AUTO, ONE PUSH, MANUAL
- DISTANCE : Select minimum distance in focus between camera and object.
- ▶ 0.1 / 1.0 / 3.0 / 6.0 / 10.0 m
- ZOOM SPEED : Select Zoom Speed
- ▶0 (Slow) ~ 7 (Fast)
- LENS REFRESH : Lens origin calibrated automatically.
- ► ONE PUSH / ON (1 day ~ 10 days)
- E.ZOOM : Select maximum digital zoom magnification.
- ► OFF / ON (max x2 ~ x19, x21, x23, x25, x28, x32)
- ZOOM PRESET : Select zoom preset
- ▶ PRESET # : Select Zoom preset number (1 ~ 5)
- ► MODE : OFF / ON
- ▷ ON i : Adjust the Zoom Position

EXPOSURE

EXPOSURE

MENU		EXPOS	URE
FOCUS EXPOSURE WHITE BAL IMAGE INTELLIGENCE		MODE AGC SHUT SPEED IRIS DSS	AUTO ON OFF
SPECIAL FUNC DISPLAY	Ļ	FLICKERLESS BRIGHTNESS WDR/BLC DAY&NIGHT	OFF OFF
[EXIT] [SAVE]	[DFLT]	[BACK] [SAV	/E] [DFL1

- ♦ MODE : Select Exposure Mode
- ► AUTO / IRIS.P / SHUT.P / MANUAL
- AGC : Select Auto Gain Control
- ► OFF / ON (AUTO, SHUT.P or IRIS.P Mode)
- ▶ 0 ~ 10 (MANUAL Mode)
- SHUT SPEED : Can be set in SHUT.P or MANUAL mode
- * 60 / 50 fps mode ► x8, x4, x2, 1/60(50), 1/120(100), 1/250, 1/700, 1/1000, 1/1600, 1/2500, 1/5000, 1/7000, 1/10000, 1/30000 sec
- * 30 / 25 fps mode ► x4, x2, 1/30(25), 1/60(50), 1/120(100), 1/250, 1/700, 1/1000, 1/1600, 1/2500, 1/5000, 1/7000, 1/10000, 1/30000 sec
- \circledast IRIS : Iris level can be set in IRIS.P or MANUAL mode
- ▶ 0 ~ 20

- DSS : Select maximum DSS (Digital Slow Shutter)
- * 60 / 50 fps mode
 - ► OFF / x2, x4, x8
- * 30 / 25 fps mode
- ► OFF / x2, x4
- FLICKERLESS : Select Flickerless mode
- ► OFF / ON (remove screen flicker)
- BRIGHTNESS : Adjust brightness level
- ► 0(dark) ~ 20(bright) steps
- WDR/BLC : Select WDR(Wide Dynamic Range) or BLC(Back Light compensation)
- ► WDR
- ▷ LEVEL : Adjust WDR level.
 - ► LOW, MID-LOW, MIDDLE, MID-HIGH, HIGH
- * WDR doesn't work in Manual Exposure Mode and Shutter Priority Mode.
- * When WDR on, CVBS output is disabled.
- ► BLC
- ▷ POSITION : Adjust the window position
- \triangleright SIZE : Adjust the window size
- ※ Can't use WDR and BLC at the same time.
- (When WDR On, BLC is Off. And when BLC is On, WDR is Off)
- * BLC doesn't work in Manual Exposure Mode.



EXPOSURE

DAY&NIGHT : Select Day&Night

▶ MODE : AUTO, / EXT-IN, / DAY / NIGHT,

 \triangleright AUTO

- ▶ DELAY : 0 ~ 255 sec
- ▶ THRS : 0 ~ 28
 - Day↔Night switching level in Auto Mode.

Switching in lower lux with lower threshold level.

► GAP : LOW, MID-LOW, MIDDLE, MID-HIGH, HIGH

Margin between Day \rightarrow Night switching level and Night \rightarrow Day switching level.

- ► IR DETECTION : Setting IR Detection mode. (ON / OFF)
- ► IR DET LEVEL : Setting IR Detection level. (LOW, MID-LOW, MIDDLE, MID-HIGH, HIGH)

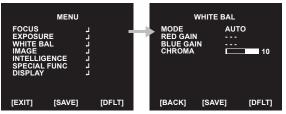
BURST : OFF / ON

- \triangleright EXT-IN
- ▶ DELAY : 0 ~ 255 sec
- ► BURST : OFF / ON
- ► POLARITY : External Input polarity (ACTIVE LOW / ACTIVE HIGH)

▷ NIGHT

► BURST : OFF / ON

WHITE BALANCE



- ♦ AWB : Select WHITE BALANCE mode
- ► AUTO / ONE PUSH↓ / MANUAL / INDOOR / OUTDOOR
- ▷ AUTO : Automatically adjusts color according to the available lighting.
- ▷ ONE PUSH : It is a fixed white balance mode that may be automatically readjusted only by pressing ONE PUSH
- ▷ MANUAL→ : Color can be corrected when the user increases or decreases "RED GAIN" or "BLUE GAIN".
- ▷ INDOOR : Set color temperature to be Indoor light (3700°K)
- ▷ OUTDOOR : Set color temperature to be Outdoor light (5100°K)
- ♦ RED GAIN : Adjust R gain value ► 0 ~ 20 steps
- ♦ BLUE GAIN : Adjust B gain value ► 0 ~ 20 steps
- ♦ CHROMA : Adjust CHROMA gain value ► 0 ~ 20 steps

IMAGE

MENU			IMAGE	J
FOCUS EXPOSURE WHITE BAL IMAGE INTELLIGENCE SPECIAL FUNC DISPLAY	ם נ נ נ נ נ נ	T	HLC J DNR MIDDLE MIRROR OFF SHARPNESS 7 ACE OFF DEFOG OFF FREEZE OFF GAMMA 0.55	
[EXIT] [SAVE]	[DFLT]		[BACK] [SAVE] [DFLT]	J

HLC : Select High Light Compensation.

When extremely bright light is projected to the camera masking is used on the portion to prevent partial saturation on the monitor.

▷ MODE : OFF / ON / NIGHT

▷ LEVEL : 0 ~ 20 steps

▷ COLOR : 0 ~ 13 steps

- DNR : Select Digital Noise Reduction
- ▶ OFF / LOW / MIDDLE / HIGH / AUTO
- ♦ MIRROR : Select a flip mode
- ► OFF / H / V / H&V
- ▷ H : You can flip the picture horizontally on the screen
- ▷ V : You can flip the picture vertically on the screen
- ▷ H&V : You can flip the picture horizontally & vertically on the screen

SHARPNESS : Adjust sharpness level

- ▶ 0 ~ 10 steps
- ACE : Select Digital WDR (Wide Dynamic Range)
- ► OFF / LOW / MIDDLE / HIGH
- DEFOG : Carry out defog function
- ► OFF / ON
 - ▷ MODE : AUTO / MANUAL
 - ▷ LEVEL : LOW / MIDDLE / HIGH
- * Can't use DEFOG and ACE at the same time (when DEFOG is On, ACE is Off)
- ♦ FREEZE : Select real or still mode
- ► OFF / ON
- GAMMA : Select GAMMA
- ▶ 0.45 / 0.55 / 0.65 / 0.75

INTELLIGENCE



INTELLIGENCE

MENU		INT	ELLIGENCE	E
FOCUS EXPOSURE WHITE BAL IMAGE INTELLIGENCE SPECIAL FUNC DISPLAY	ם נו נו נו נו נו נו	PRIVACY MOTION DIS	Ó	FF FF FF
[EXIT] [SAVE]	[DFLT]	[BACK]	[SAVE]	[DFLT]

- ◆ PRIVACY : Hide an area you want to hide on the screen
 ▶ OFF / ON, →
 - \triangleright MASK# : Select mask area number (1 ~ 24)
 - ▷ MODE : Mask enable or disable (OFF / ON)
 - ▷ POSITION : Adjust the mask position
 - ▷ SIZE : Adjust the mask size
 - \triangleright COLOR : Select mask color (0 ~ 13)
 - \triangleright TRANS : Select mask transparency level (0 ~ 4)

- MOTION : When there is movement of the subject in the screen, there will be an motion detection
 ▶ OFF / ON-J
 - ▷ AREA# : Setting 3 areas(1~3) of motion detection
 - ▷ MODE : OFF / ON (Limit and define areas of motion detection)
 - ▷ SENSITIVITY : Adjust sensitivity of MD (0 ~ 20 steps)
 - More sensitive to setting to low step with sensitivity
 - ▷ POSITION : Adjust the Area position
 - ▷ SIZE : Adjust the Area size
 - \triangleright INTERVAL :Select the alarm interval time (0 ~ 255sec)
 - ▷ DWELL TIME : Select the duration time about changing MD mode (0 ~ 255sec)
 - \triangleright ZOOM PRESET : Select Motion Zoom Preset Mode and Position (OFF / ON \leftarrow)
- DIS : Select Digital Image Stabilizer mode
- ► OFF / ON
- ▷ RANGE : Setting the image compensation range. (10%, 20%, 30%)
- ▷ FILTER : Setting the sensitivity to hold DIS function in worst case. (LOW, MIDDLE, HIGH)
- ▷ AUTO C : Setting Auto Centering mode (OFF, HALF, FULL)

SPECIAL FUNC

SPECIAL FUNC

MENU			SP	ECIAL F	UNC	
FOCUS EXPOSURE WHITE BAL IMAGE INTELLIGENCE SPECIAL FUNC DISPLAY	- - - - - - -		DEFECT IMAGE RA SYSTEM HD FORMA HD PRI. COMM		J COM NTS 1080 HD-S J	C p/30fps
[EXIT] [SAVE]	[DFLT]	ſ	BACK]	[SAVE	≡]	[DFLT]

 DEFECT : Compensates for bad pixels that may occur. Occurs when the whole screen is in full black or if there is bad pixelation and it changes the THRS values until the screen is fixed.
 When you use this function, you have to block the lens for blocking lights into the lens.
 IMAGE RANGE : Select image bit range. (Full : 100%, Compressed : 75%)

▶ FULL, COMP, USER

- \triangleright LEVEL : Select user mode level (0 ~ 32)
- SYSTEM : Select NTSC(30/60fps) or PAL(25/50fps).
- HD FORMAT : Select Digital output (1080p/30(25)fps, 1080p/60(50)fps, 720p/30(25)fps, 720p/60(50)fps)
- * 1080p60(50) format is available in the TVI switch is off.

- ♦ HD PRI. : Select HD output priority
- COMM : Set up the camera ID, baud rate, protocol
- \triangleright ID : Select the camera ID
 - ▶ 1 ~ 255
- ▷ BAUD RATE : Select serial communication speed
 - 2400 / 4800 / 9600 / 19200 / 38400 / 57600 / 115200bps
- ▷ PROTOCOL : Select operating protocol
 - ► VISCA / PELCO-D / PELCO-P / UPDATE
- ▷ UTC : Select operating protocol
- ▶ PELCO-C / HIKVISION-C

DISPLAY

DISPLAY

MENU		DISP	LAY
FOCUS EXPOSURE WHITE BAL IMAGE INTELLIGENCE SPECIAL FUNC DISPLAY		DISP SEL SET TITLE INIT SEL SET INIT MSG LANGUAGE	ON J J ON J J ENGLISH
[EXIT] [SAVE]	[DFLT]	[BACK] [SA	/E] [DFLT]

♦ DISP SEL : Select display item.

► OFF / ON

D ID : OFF / ON

▷ TITLE : OFF / ON

▷ ZOOM RATIO : OFF / ON

▷ SYSTEM MSG : OFF / ON (MD Alarm)

◆ SET TITLE : Select camera title menu (Text edit- max 40 characters)

♦ INIT SEL : Select display initial message.

► OFF / ON

▷ ID : OFF / ON

▷ BAUDRATE : OFF / ON

▷ PROTOCOL : OFF / ON

▷ VERSION : OFF / ON

▷ INIT MSG : OFF / ON

SET INIT MSG : modify initial message. (Text edit – max 40 characters)
 LANGUAGE : Select language.

English / Simplified Chinese / Traditional Chinese / Japanese

* Character Table of Text edit Mode

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

SPECIFICATION

Camera				
Image Sensor		1/2.8" Sony CMOS Sensor		
Total Pixels		1945(H) x 1109(V) = 2.16M Pixels		
Active Pixels		1945(H) x 1097(V) = 2.13M Pixels		
Video Format		1080p@60/50fps, 1080p@30/25fps, 720p@60/50fps, 720p@30/25fps		
Min.	Color	0.005 lux / DSS 0.00125 lux		
Illumination	B/W	0.0008 lux / DSS 0.0002 lux		
S/N Ratio Video Output		more than 50dB(AGC off)		
		HD-SDI, EX-SDI, TVI, CVBS		

Lens					
Lens Type	Lens Type		30x Day & Night Zoom Lens		
		Optical x30, Digital x32			
		f = 4.6mm ~ 136.0mm			
Aperture Ratio		F1.63(Wide) ~ F4.85(Tele)			
Angle of View	Wide	73.3° (±5%)	65.4° (±5%)	38.3° (±5%)	
(D, H, V)	Tele	2.6° (±5%)	2.2° (±5%)	1.3° (±5%)	

General		
Power Source	9-15V DC	
Power Consumption	Max. 500mA	
Operating Temperature	-10°C ~ +50°C / 0% ~ 90% RH	
Dimensions (WxHxD)	67.4 x 74.4 x 130.1 mm	
Weight	0.57 kg	

SPECIFICATION

SPECIFICATION

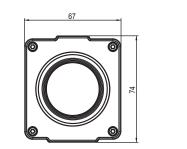
Camera Functions			
Camera Title	ID / Title / Zoom Ratio / System Message		
Day & Night	Auto / Day / Night / Ext-In		
WDR / BLC	Off / WDR / BLC / HLC		
ACE	Off / Low / Middle / High		
DNR	Auto / Off / Low / Middle / High		
Defog	Off / On (Auto/Manual)		
Image Stabilization	Off / On		
Motion Detection	Off / On (3 Positions)		
Privacy Mask	Off / On (24 Positions)		
Digital Slow Shutter Off / x2 / x4 / x8 (60FPS or 50FPS Mode or			

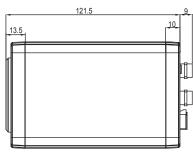
Camera Functions	
Gain Control	Off / On
White Balance	Auto / One Push / Manual / Indoor / Outdoor
Shutter Speed	1/30(25) ~ 1/30,000 sec
E.Zoom	Off / x2 ~ x32
Digital Flip	Off/H/V/H&V

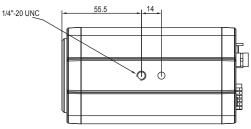
SPECIFICATION











If there are problems in operation, please refer to the items below. If the problem persists, please contact the agent you purchased this product from.

Trouble shooting Nothing appears on the screen. -Please check the power connection. -Please check the video signal line connection. • The video image is not clear. -Please clean the lens with a clean cloth or brush. -Please adjust that the screen is not exposed directly to a bright light. -Please move the camera if necessary. • The screen is dark. -Please adjust the contrast feature of the monitor. -If you have an intermediate device, set the 75 Ω /Hi-Z properly, and check the terminals. -Please adjust the brightness level. The MOTION DETECTION function is not working -Please check if "MOTION DETECTION" mode is turned on. -Please check if the MD Sensitivity is too high. -Please check the setting of the MD AREA The WDR function is not working -Please check if the WDR Level is too low. -Please check if the AE Mode is set to MANUAL. The WDR doesn't work in MANUAL, Shutter priority Exposure mode. • Colors are not quite right. -Please check if the camera is facing directly into sunlight or fluorescent light. The Day&Night function doesn't work. - Please check if the AGC of EXPOSURE menu is set to OFF. - The Auto Day&Night doesn't work in AGC OFF status.