
Operation Manual

**1/3" High Resolution Face View Camera
WDC-4605XV**





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 appliance

Regulatory Notice

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, and
- (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 in a residential installation.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and use in accordance with the instructions, may cause harmful interference to radio communications.

Operation of this equipment in a residential area is likely to cause interference, in which case the user will be required to correct the interference at his own expense.

WARNING- Changes or modifications not expressly approved by the manufacturer could void the users authority to operate the equipment.

CAUTION- To prevent electric shock and risk of fire hazards:

- Do NOT use power sources other than that specified.
- Do NOT expose this appliance to rain or moisture.

1.0 Features

- 1/3" Sony Super HAD CCD
- User Friendly OSD Menu Control
- High Resolution of 600 TV Line
- Easy Camera Level Adjustment
- Day& Night
- Dual Power : DC 12V and AC 24V
- DNR (Digital Noise Reduction)
- Privacy Function

2.0 Warnings

- **The camera needs periodic inspection.**

Contact an authorized technician for inspection.

- **Stop using your camera when you find a malfunction.**

If you use your camera around smoke or unusual heat for a long time, fire may be caused.

- **Do not install the camera on a surface that can not support it.**

Unless the surface is suitable, it could cause falling or other hazards.

- **Do not hold plug with wet hands.**

It could cause an electric shock.

- **Do not disassemble the camera.**

It may result in fire, electric shock or other hazards.

- **Do not use the camera close to a gas or oil leak.**

It may result in fire or other hazards.

3.0 Precautions

Do not install the camera in extreme temperature conditions.



Only use the camera under conditions where temperatures are between -10 Deg. C and +50 Deg. C. (14 Deg. F and 122 Deg. F) Be especially careful to provide ventilation when operating under high temperatures.

Do not install or use the camera in an environment where the humidity is high.



It can cause the image quality to be poor.

Do not install the camera under unstable lighting conditions.



Severe lighting change or flicker can cause the camera to work improperly.

Do not touch the front lens of the camera.



It is one of the most important parts of the camera. Be careful not to be stained by fingerprint.



Note

- If the camera is exposed to spotlight or object reflecting strong light, smear or blooming may occur.
- Please check that the power satisfies the normal specification before connecting the camera.

Do not drop the camera or subject them to physical shocks.



It can cause malfunctions to occur.

Never keep the camera face to strong light directly.



It can damage the CCD.

Do not expose the camera to rain or spill beverage on it.



If it gets wet, wipe it dry immediately. Liquids can contain minerals that corrode the electronic components.

Do not expose the camera to radioactivity.

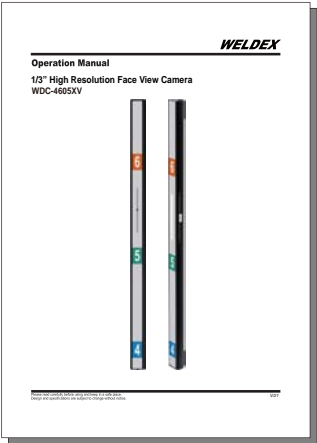
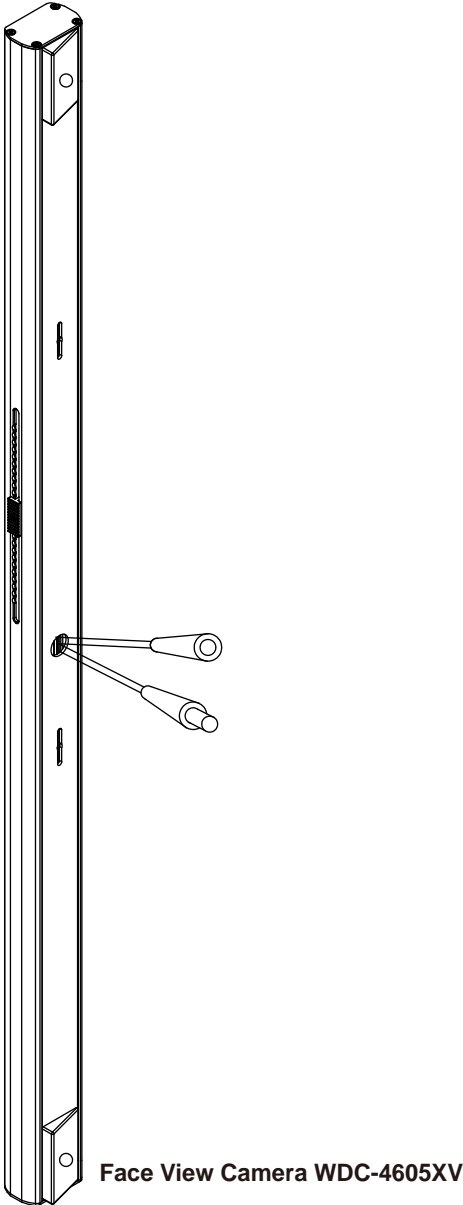


If it is exposed to radioactivity, For heated CCD, it will be out of order.

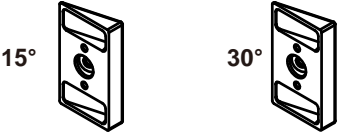
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4.0 Components

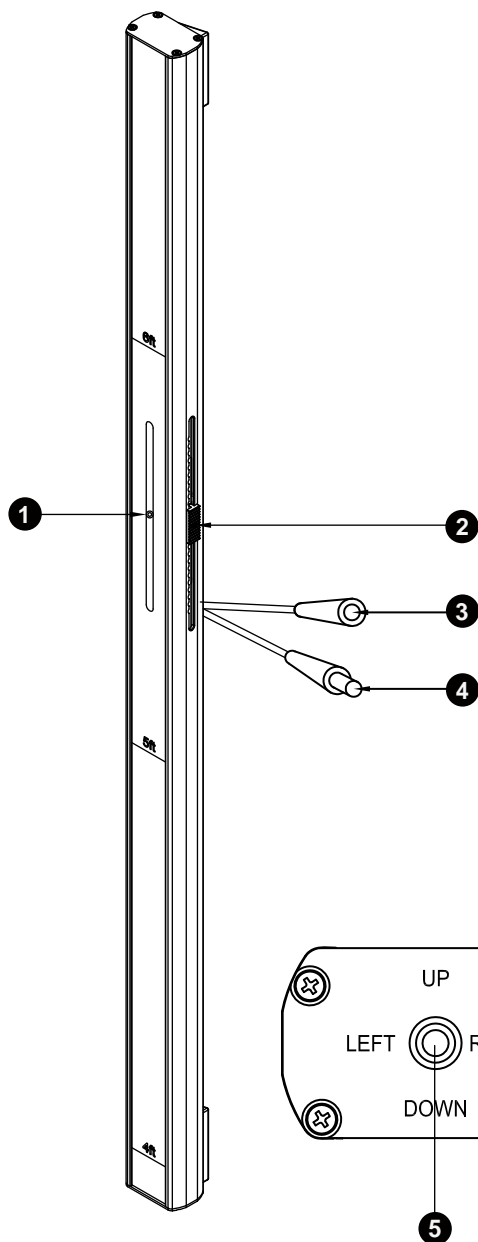


Operation WDC-4605XV



Angle adjustment bracket

5.0 Names and Function of Parts



❶ Pin hole Lens 3.6

❷ Height Adjustable Knob

❸ Power Input Jack

❹ Video Output Jack

❺ Jog Controller (Set button)

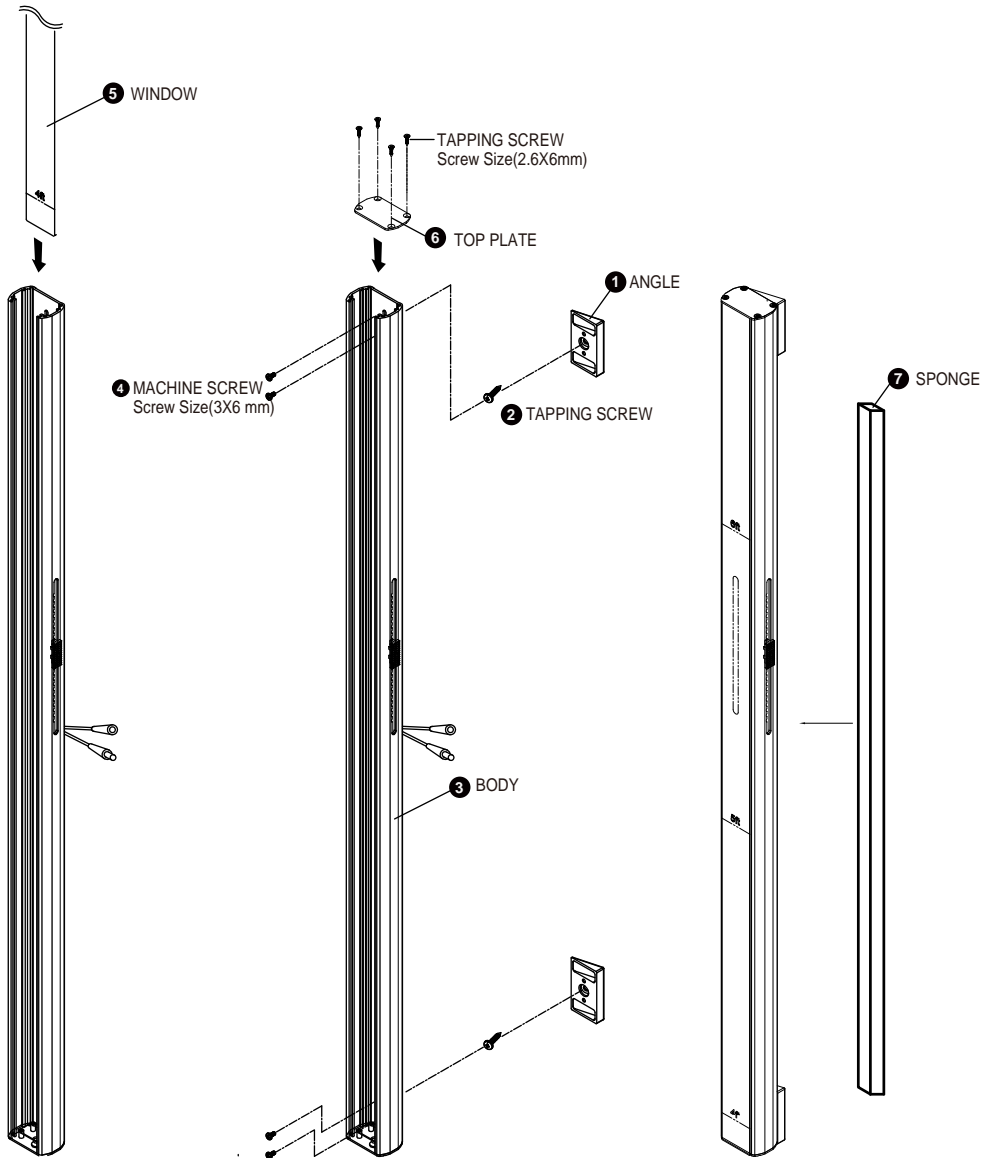
- **SET button:** Used for the menu display. This button can be used to confirm settings after changing the value of the selected function or current conditions.

It is Jog Controller then you move Left&Right / Up & Down.

- **UP & DOWN buttons:** Used for selecting items by moving the cursor up or down on the menu screen.

- **LEFT & RIGHT buttons:** Used when changing item values, by moving the cursor to the left or right on the menu screen.

6.0 Installation



6.0 Installation

Please refer to the Installation Picture Page.7

1. Place 2 Angle Brackets(Angle adjustable 15°/30°) to right position(Top & Bottom).
2. Tapping screw bolted(4 x 16mm)
3. Make 2 holes to wall where you want to install (6ft 7.8" from the ground/4ft location)
4. M3 Screw bolted((3 x 6mm)
5. Insert Window into Body
6. Tighten tapping screws after placing a Top Plate (screw size: 2.6 x 6mm)
7. Attach sponge between 2 angles

7.0 Setup Menu

7.1 MAIN MENU

SETUP	
LENS	DC
EXPOSURE	↓
WHITE BAL	ATW1
BACKLIGHT	OFF
DAY&NIGHT	AUTO ↓
DPC	↓
SPECIAL	↓
RESET	↓
EXIT	

The menu consists of the "Main Menu" and "Sub Menu". The main menu is 8 kinds of camera functions can be selected. To the right of each main menu selection, the sub-menu is displayed.

LENS

- LENS : Select lens type
 - ▷ DC /VIDEO / MANUAL

7.2 EXPOSURE

SETUP		EXPOSURE	
LENS	DC	SHUTTER	AUTO
EXPOSURE	↓	BRIGHTNESS	50
WHITE BAL	ATW1	AGC	----
BACKLIGHT	OFF	DWDR	OFF
DAY&NIGHT	AUTO ↓	RETURN	RET ↓
DPC	↓		
SPECIAL	↓		
RESET	↓		
EXIT			

- SHUTTER : You can set to auto or manual mode.
 - ▷ AUTO, 1/60(50), FLK, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/5000, 1/10000, 1/100000sec
- BRIGHTNESS : You can adjust brightness level.
 - ▷ 0(dark) ~ 255 (bright) steps
- AGC : You can select auto gain control level
 - ▷ OFF / LOW / MIDDLE / HIGH
- DWDR : You can select WDR (Wide Dynamic Range) level.
 - ▷ DWDR : OFF / ON
 - ▶ LEVEL : 0~35 steps

7.3 WHITE BALANCE

SETUP		WB MANUAL	
LENS	DC	COLOR TEMP	MANUAL
EXPOSURE	↓	BLUE	111
WHITE BAL	ATW1	RED	095
BACKLIGHT	OFF	RETURN	RET ↓
DAY&NIGHT	AUTO ↓		
DPC	↓		
SPECIAL	↓		
RESET	↓		
EXIT			

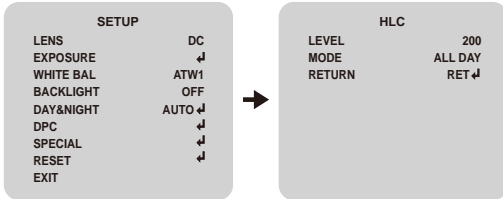
- WHITE BAL : You can select white balance mode.
 - ▷ ATW1 / ATW2 / AWC → SET / MANUAL (INDOOR / OUTDOOR / MANUAL)
 - ▶ ATM1 : Automatically adjusts color according to the available lighting. (2500°K → 9500°K)
 - ▶ ATW2 : Automatically adjusts color according to the available lighting. (2300°K → 10000°K)
 - ▶ AWC→SET : It is a fixed white balance mode that may be automatically readjusted only by pressing SET Button in ONE PUSH mode.
 - ▶ OUTDOOR : Set color temperature to be Outdoor light (5400°K)
 - ▶ INDOOR : Set color temperature to be Indoor light (3200°K)
 - ▶ MANUAL : Color can be corrected when the user increases or decreases " Red Gain" or "Blue Gain"
 - ▶ RED GAIN : Adjust R gain value 0 ~ 255
 - ▶ BLUE GAIN : Adjust B gain value 0 ~ 255

7.4 BACKLIGHT

SETUP		BLC	
LENS	DC	AREA SEL	AREA1
EXPOSURE	↓	AREA STATE	ON
WHITE BAL	ATW1	GAIN	042
BACKLIGHT	OFF	HEIGHT	005
DAY&NIGHT	AUTO ↓	WIDTH	004
DPC	↓	LEFT/RIGHT	006
SPECIAL	↓	TOP/BOTTOM	005
RESET	↓	RETURN	RET ↓
EXIT			

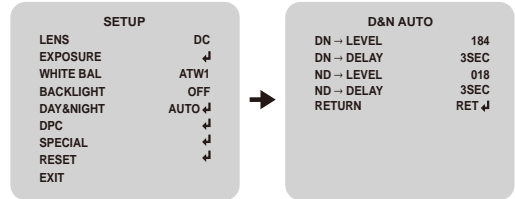
- BACKLIGHT :Select OFF / BLC / HLC
 - ▷ BLC (Back Light Compensation)
 - ▶ BLC : Select area, gain
 - ▶ AREA SEL : Select AREA1, AREA2
 - ▶ AREA STATE : Select OFF / ON
 - ▶ GAIN : Select 0 ~ 255 steps
 - ▶ HEIGHT : Select 0 ~ 15 steps
 - ▶ WIDTH : Select 0 ~ 15 steps
 - ▶ LEFT / RIGHT : Select 0 ~ 15 steps
 - ▶ TOP / BOTTOM : Select 0 ~ 15 steps

7.4 BACKLIGHT



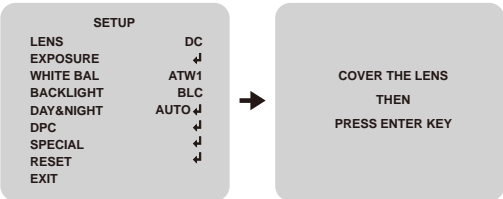
- ▷ HLC (High Light Compensation)
 - ▶ LEVEL : Select 0 ~ 255 steps
 - ▶ MODE: ALL DAY, NIGHT ONLY

7.5 DAY & NIGHT



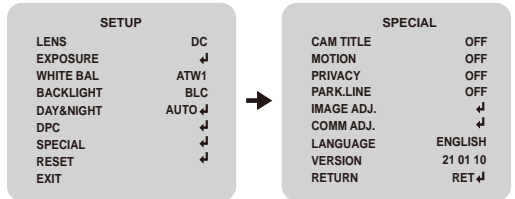
- DAY & NIGHT : Select AUTO / COLOR / B/W / EXT
 - ▷ AUTO : Day & night Auto mode
 - ▶ D → N LEVEL : 128 ~ 192 steps
 - ▶ D → N DELAY : 1 ~ 30 SEC
 - ▶ N → D LEVEL : 0 ~ 64 steps
 - ▶ N → D DELAY : 1 ~ 30 SEC
 - ▷ COLOR : Day & Night only color mode
 - ▷ B/W : Day & night B/W mode
 - ▶ BURST : OFF / ON
 - ▶ IR SMART : OFF / ON
 - ▶ R GAIN : 0 ~ 255
 - ▶ HEIGHT : 0 ~ 15
 - ▶ WIDTH : 0 ~ 15
 - ▶ LEFT / RIGHT : 0 ~ 15
 - ▶ TOP / BOTTOM : 0 ~ 15
 - ▶ IR LEVEL : HIGH / LOW
 - ▷ EXT : Day & Night EXT mode

7.6 DPC (Dead Pixel Compensation)



- DPC : Select dead pixel compensation processing

7.7 SPECIAL



- CAM TITLE : Select camera title menu (Text edit).
- MOTION : Select camera title menu (Text edit)
 - ▶ AREA SEL : Select AREA1, AREA2, AREA3, AREA4
 - ▶ AREA STATE : Select OFF / ON
 - ▶ HEIGHT : Select 0 ~ 15 steps
 - ▶ WIDTH : Select 0 ~ 15 steps
 - ▶ LEFT / RIGHT : Select 0 ~ 15 steps
 - ▶ TOP / BOTTOM : Select 0 ~ 15 steps
 - ▶ DEGREE : Select 0 ~ 255 steps
 - ▶ VIEW : OFF / ON

7.7 SPECIAL

- PRIVACY : You can select Hide an area on the screen.
 - ▷ AREA SEL : Select AREA1, AREA2, AREA3, AREA4, AREA5, AREA6, AREA7, AREA8
 - ▷ AREA STATE : Select OFF / ON
 - ▷ HEIGHT : Select 0 ~ 124 steps
 - ▷ WIDTH : Select 0 ~ 200 steps
 - ▷ LEFT / RIGHT: Select 0 ~ 200 steps
 - ▷ TOP / BOTTOM : Select 0 ~ 124 steps
 - ▷ COLOR : Select 0 ~ 15 steps
- PARK. LINE : You can select parking line on the screen.
 - ▷ LT : You can adjust the top left area on screen.(0 ~ 255 steps)
 - ▷ LB : You can adjust the bottom left area on screen.(0 ~ 255 steps)
 - ▷ RT : You can adjust the top right area on screen.(0 ~ 255 steps)
 - ▷ RB : You can adjust the bottom right area on screen.(0 ~ 255 steps)
 - ▷ F : You can adjust the front area on screen.(0 ~ 255 steps)
 - ▷ N : You can adjust the near area on screen.(0 ~ 255 steps)
 - ▷ T : You can adjust the parking line thickness.(0 ~ 15 steps)

7.7 SPECIAL

SPECIAL		IMAGE ADJ.	
CAM TITLE	OFF	LENS SHAD.	OFF
MOTION	OFF	2DNR	ON
PRIVACY	OFF	MIRROR	OFF
PARK.LINE	OFF	FONT COLOR	↓
IMAGE ADJ.		CONTRAST	138
COMM ADJ.		SHARPNESS	021
LANGUAGE	ENGLISH	DISPLAY	CRT ↓
VERSION	21 01 10	NEG. IMAGE	OFF
RETURN	RET ↓	RETURN	RET ↓

- IMAGE ADJ. : You can adjust camera image.
 - ▷ LENS SHAD : You can adjust lens shading on screen.
 - ▶ LEVEL : 0 ~ 255 steps
 - ▷ 2DNR : You can select Digital Noise Reduction on screen. (OFF/ON)
 - ▷ MIRROR : You can select mirror on screen. (OFF/ON)
 - ▷ FONT COLOR : You can select font color on screen.
 - ▶ FONT : 0 ~ 15 steps
 - ▶ ID & TITLE : 0 ~ 15 steps

7.7 SPECIAL

- ▷ CONTRAST : You can adjust contrast on screen. (0 ~ 255 steps)
- ▷ SHARPNESS : You can adjust sharpness on screen. (0 ~ 31 steps)
- ▷ DISPLAY : You can adjust display. (CRT / LCD / USER)
 - ▶ CRT (Cathode Ray Tube, Braun tube)
 - ▶ PED LEVEL : 0 ~ 63 steps
 - ▶ COLOR GAIN : 0 ~ 255 steps
 - ▶ LCD (Liquid Crystal Display)
 - ▶ GAMMA : 0.05 ~ 1.00 steps
 - ▶ PED LEVEL : 0 ~ 63 steps
 - ▶ COLOR GAIN : 0 ~ 255 steps
 - ▶ USER
 - ▶ GAMMA : 0.05 ~ 1.00 steps
 - ▶ PED LEVEL : 0 ~ 63 steps
 - ▶ COLOR GAIN : 0 ~ 255 steps
- ▷ NEG.IMAGE : You can select negative display. (OFF/ON)

7.7 SPECIAL

SPECIAL		COMM ADJ.	
CAM TITLE	OFF	CAM ID	001
MOTION	OFF	BAUD RATE	9600
PRIVACY	OFF	PROTOCOL	PELCO-D
PARK.LINE	OFF	DISPLAY ID	OFF
IMAGE ADJ.		ID POS	↓
COMM ADJ.		RETURN	RET ↓
LANGUAGE	ENGLISH		
VERSION	21 01 10		
RETURN	RET ↓		

- COMM ADJ. : You can adjust command.
 - ▷ CAM ID : Select the camera ID
 - ▶ 0 ~ 255
 - ▷ BAUD RATE : Select serial communication speed.
 - ▶ 2400 / 4800 / 9600 / 19200 / 38400 / 57600 bps
 - ▷ PROTOCOL : Select operating protocol
 - ▶ PELCO-D / PELCO-P
 - ▷ DISPLAY ID : Select display item.
 - ▶ OFF/ON
 - ▷ ID POS : You can adjust ID position on screen.
- LANGUAGE : You can select language
 - ▷ ENGLISH / CHINESE
- VERSION : Factory vision.
- RESET : Factory default reset.

8 TROUBLESHOOTING

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.

Problems	Troubleshooting
Nothing appears on the screen.	<ul style="list-style-type: none"> • Please check the power connection. • Please check the video signal line connection. • Please check and make sure that the lens mode is set to DC (VIDEO) when using a VIDEO (DC) lens.
The video image is not clear.	<ul style="list-style-type: none"> • 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. • Please readjust the back-focus of the camera.
The screen is dark.	<ul style="list-style-type: none"> • Please adjust the contrast feature of the monitor. • If you have an intermediate device, set the 75Ω /Hi-Z properly, and check the terminals. • Please check if an auto iris lens is being used and adjust the brightness level.
The MOTION DETECTION function is not working	<ul style="list-style-type: none"> • Please check if "MOTION DETECTION" mode is turned on. • Please check if the MD Sensitivity is too low. • Please check the setting of the MD AREA.
The WDR function is not working	<ul style="list-style-type: none"> • 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 Exposure mode.
Colors are not quite right.	<ul style="list-style-type: none"> • Please check if the camera is facing directly into sunlight or fluorescent light. • Please check if an auto iris lens is being used. • Please check the connection of the lens connector cable.
The Day&Night function doesn't work	<ul style="list-style-type: none"> • Please check if the AGC of EXPOSURE menu is set to OFF. • The Auto Day&Night Function doesn't work in AGC OFF.

9. Specification

SPECIFICATIONS		
	NTSC	PAL
Power Source	AC 24 Volt & DC 12 Volt, Power Dual	AC 24 Volt & DC 12 Volt, Power Dual
CDD		
Total Pixels	811(H) x 508(V)	795(H) x 596(V)
Effective Pixels	768(H) x 494(V)	752(H) x 582(V)
Size	1/3 inch Interline Transfer CCD	1/3 inch Interline Transfer CCD
Scanning System	2:1 Interlace	2:1 Interlace
SYNC		
Synchronization	INT/LL Selectable, 0~359° (Adjustable)	INT/LL Selectable, 0~359° (Adjustable)
Frequency	Horizontal:15.734 KHz Vertical :59.94 Hz	Horizontal: 15.625 KHz Vertical : 50.00 Hz
ELECTRICAL		
Resolution	600 TV Lines	600 TV Lines
Video Output	1.0Vp-p/75 (Video 0.714Vp-p Sync 0.286Vp-p)	1.0Vp-p/75 (Video 0.7Vp-p Sync 0.3Vp-p)
S/N (Y signal)	50dB (AGC Off)	50dB (AGC Off)
Min. Illumination	0.3Lux/F1.2(Color), 0.1Lux/F1.2(B/W), 0.002Lux(Sens-up)	0.3Lux/F1.2(Color), 0.1Lux/F1.2(B/W), 0.002Lux(Sens-up)
COLOR	ON/AUTO	ON/AUTO
Gain Control	OFF / LOW / MIDDLE / HIGH	OFF / LOW / MIDDLE / HIGH
White Balance	ATW/AWC/MANUAL(1,800°K~10,500°K)	ATW/AWC/MANUAL(1,800°K~10,500°K)
Electronic Shutter Speed	AUTO/MANUAL(1/60~1/120,000)	AUTO/MANUAL(1/50~1/120,000)
Sens-Up	ON/AUTO	ON/AUTO
O.S.D	Built-in	Built-in
Motion Detection	ON / OFF (4 Programmable Zone)	ON / OFF (4 Programmable Zone)
DNR	OFF / LOW / MIDDLE / HIGH(Noise Reduction)	OFF / LOW / MIDDLE / HIGH(Noise Reduction)
Mirror	Built-in(Horizontal Image Inversion)	Built-in(Horizontal Image Inversion)
Privacy Function	ON / OFF (4 Programmable Zone)	ON / OFF (4 Programmable Zone)
Lens Size	2.9mm	2.9mm
Operation Temp. / Humidity	-10 °C ~ +50 °C / 30~90% RH	-10 °C ~ +50 °C / 30~90% RH
Weight		

WELDEX CORPORATION

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