

# MAIN FEATURES

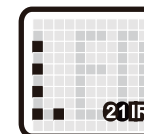
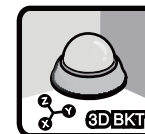
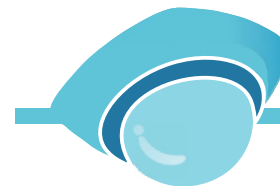
## USER MANUAL

IV-HDCM-500DF

### DAY/NIGHT HD-SDI CAMERA



☛ Main Features .....	P1
☛ Cautions.....	P1
☛ Packing List .....	P1
☛ Installation.....	P2
☛ Specifications .....	P3



- 1 3-Axis Bracket**  
Support can rotate separately in the XYZ axes Vandal-proof design.
- 2 21 IR**  
Optionally equipped with 21 high intensity infra-red LED lights.
- 3 Dual Power Supply Design**  
Dual power supply board provides AC 24V/DC 12V inputs.

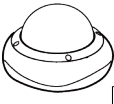



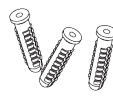

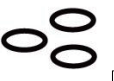


## CAUTIONS

- 1** Do not adjust lens in a wet environment to avoid damage to the circuitry.
- 2** Do not install next to another light source as this may cause light reflection.
- 3** When assembly is complete, check that all screws in the unit are properly secured.
- 4** The 21 -IR turns on in 3 stages ( 7/14/21 LEDs ) and this is normal.



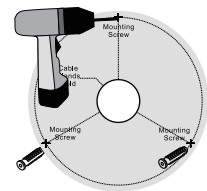
## PACKING LIST

Camera Unit  1	User Manual  2	Positioning stricker  3	Wrenches  4	Wall Anchor Plastic Sheath  5	Wall Anchors  6
O-ring  7					

# INSTALLATION

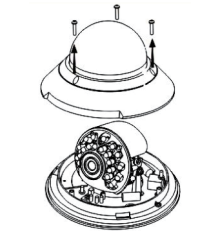
# INSTALLATION

## STEP 1



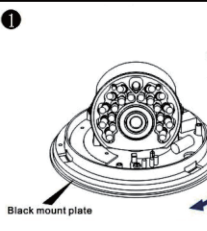
- 1 Attach positioning sticker(P1/No.3) to the wall.
- 2 Drill holes as indicated and attach wall anchor plastic sheaths(P1/No.5).

## STEP 2



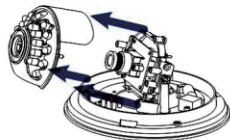
- 1 Use the T20 Hex Bolt Ring Spanner (P1/No. 5) and remove the vandal screw.
- 2 Open the cover.

## STEP 3



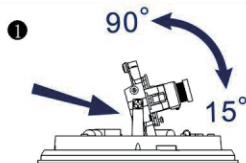
- 1 Rotate to the angle what you want, Tight the screw.

## STEP 4

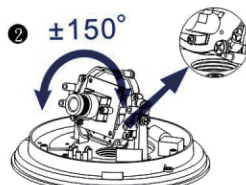


Open the IR module, and adjust the zoom lens.

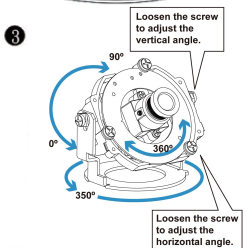
## STEP 5



- 1 Loosen the screws to adjust camera direction, the vertical angle is 15° to 90°. Tighten the screws after adjustment.

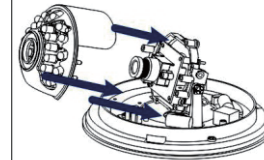


- 2 Loosen the screws to adjust horizontal angle, the angle is ±150°. Tighten the screws after adjustment.



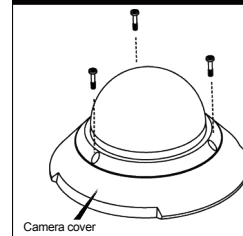
- 3 Maximum range of rotation adjustment is 360°. Tighten the screws after adjustment. **Caution:** While rotating object to 360, take care to drop.

## STEP 6

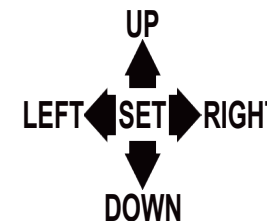


Plug in the IR module.

## STEP 7



Align the marks of black mount plate and camera cover, then tighten the vandal screw as figure.



# SPECIFICATIONS

MODEL NO.	IDV-2LP5N4HEX2
IMAGE SENSOR	1/2.7" 2.1MP CMOS Sensor
SCANNING SYSTEM	PROGRESSIVE SCAN
RESOLUTION	2.1Megapixel 1080p, 1920*1080(30FPS)
LENS TYPE	4.0mm
SENSITIVITY (F1.2)	1.0 Lux
EFFECTIVE PIXELS	1944(H)*1092(V)
S/N RATIO	More than 50dB
SYNCHRONIZATION	Internal
GAMMA CORRECTION	0.45
DEFOG	ON / OFF (FOG OR RAIN)
ELECTRONIC SHUTTER	1/30 / 1/60 (1/50) / FLK / 1/250 ~ 1/50000
O.S.D. LANGUAGE	ENG / JPN / CHN1 / CHN2
GAIN CONTROL	OFF / LOW / MID / HIGH
3DNR	ON / OFF
MOTION DETECTION	3 AREA
PRIVACY	8 AREA
Mirror (H-REV)	OFF / MIRROR / V-FLIP / ROTATE
SHARPNESS	Level Adjustable
D & N SELECTION	AUTO / COLOR / B&W / EXT(ICR)
BLEMISH COMPENSATION	OSD Control
VIDEO OUTPUT (BNC Type)	HD-SDI : 1.485G/s(SMPTE292M)1.0Vpp-75Ω
POWER SUPPLY	DC 12V / AC 24V
POWER CONSUMPTION	IR OFF : 400 mA (MAX) / IR ON : 600mA (MAX)
WHITE BALANCE	ATW / AWC -->SET / INDOOR / OUTDOOR / MANUAL
BACK LIGHT COMPENSATION	OFF / BLC / HBLC (Selectable)
IR LED	21 IR LED
DIMENSION	138mm * 79mm
NET WEIGHT	630g
STORAGE TEMPERATURE	-30° ~ +60° C
OPERATING TEMPERATURE	-10° ~ +45° C

\*The above specification is subject to change without prior notice

SET UP MENU	
LENS	• DC • MANUAL
EXPOSURE	• SHUTTER • AGC • SENS-UP • BRIGHTNESS • ACCE • DEFOG • BACKLIGHT • RETURN
WHITE BAL	• ATW • AWC→SET • INDOOR • OUTDOOR • MANUAL
DAY&NIGHT	• AUTO • COLOR • B/W
NR	• 2NR • 3NR • LEVEL • SMART NR • RETURN
SPECIAL	• CAM TITLE • FREEZE • MOTION • PRIVACY • LANGUAGE • DEFECT • RS485 • VERSION • RETURN
ADJUST	• SHARPNESS • MONITOR • OSD • LSC • NTSC/PAL • RETURN
RESET	• FACTORY • RETURN
EXIT	

#### Note

- ▶ RETURN :  
RET(RETURN) : Select this to save the setting for this menu and return to the upper menu.
- END : Select this to save the setting for this menu and exit the SET UP menu.

## LENS

- **DC** : Select Auto Iris Lens

When DC is select, you can control screen brightness. The range of bright control is between 0 and 100 (45 in case of WDR mode). Adjust the brightness appropriately for optimal screen brightness.

- **Manual** : Select Manual Lens

#### Note

- ▶ Some lenses may not work properly, depending on the setting of the BRIGHTNESS LEVEL.
- ▶ It may not work properly depending on the installed lens. Set the Level of the lens to the optimal value.

## EXPOSURE

- SHUTTER : 1/30,FLK, 1/250, 1/500, 1/1000, 1/2000, 1/5000, 1/10000, 1/50000, x2, X3, AUTO.
- AGC : LOW, MIDDLE, HIGH.
- SENSE-UP : x2, x3. (In Auto mode)
- BRIGHTNESS : 1 ~ 100.
- ACCE (D-WDR) : OFF / LOW / MIDDLE / HIGH

- DEFOG : DEFOG or Rain
- BACKLIGHT : OFF, BLC, HBLC

–BLC : Enables a user to directly select a desired area from a picture, and to video the area more clearly.

- > GAIN : MIDDLE, HIGH, LOW.
- > AREA : Select POSITION, SIZE, RET, AGAIN.
- > DEFAULT : Reset the BLC setting to the factory defaults.
- > RETURN : (RET / END)

–HSBLC : If there is a high light installed in a limited environment such as an apartment parking garage or gas station entrance, removing the high light makes it possible to view car license plates efficiently.

- > SELECT : AREA 1 ~ AREA 4.
- > DISPLAY : (ON / OFF) You can use ↑, ↓, ←, → to adjust POSITION and SIZE.
- > LEVEL : 0 ~ 100.
- > MODE : ALL DAY / NIGHT.
- > BLACK MASK : ON / OFF
- > DEFAULT : Reset the HSBLC setting to the factory defaults.
- > RETURN : (RET / END)

• RETURN : (RET / END)

# 1

## WHITE BAL.< WHITE BALANCE >

- ATW : 1800°K ~ 10500°K.
- AWC→SET : Shoot a white paper push SET button..
- INDOOR : 4500°K ~ 8500°K.
- OUTDOOR : 1800°K ~ 10500°K.
- MANUAL : Select this to fine-tune White Balance manually.  
Set White Balance first by using the ATW or AWC mode.  
After that switch to MANUAL mode, fine-tune the White Balance and then press SET button.

## DAY NIGHT

- AUTO : If use IR LED with Light Sensor, it is no function.
  - DELAY : 0 ~ 60 seconds.
  - D→N (AGC) : 0 ~ 100.
  - N→D (AGC) : 0 ~ 100.
- COLOR : This picture is always displayed in color.
- B/W : This picture is always displayed in black and white.
  - BURST : (ON / OFF)
  - IR SMART:OFF/ON
    - > LEVEL : 0 ~ 15.
    - > AREA : You can use ↑, ↓, ←, → to adjust POSITION and SIZE.
    - > IR LED : ON / OFF
    - > IR PWM : 0 ~ 15.
    - > RETURN : RET/END.

## NR

- 2 DNR : OFF/ON
- 3 DNR : OFF/ON
  - OFF : Deactivates the DNR Function. Noise in not reduced.
  - ON : Activates the DNR so that noise is not reduced.  
Press the SET button then you can adjust the noise reduction level.
    - > S-LEVEL : 0 ~ 100.
    - > E-LEVEL : 0 ~ 100.
- LEVEL : 0 ~ 100.
- SMART NR : OFF/ON (SMART NR working when 3DNR level >40)
- RETURN : (RET/END)

## SPECIAL

- CAM TITLE : If you enter a title, the title will appear on the monitor.
    - OFF : No title will be displayed on the monitor even if you enter one.
    - ON : Press the SET button to the menu.
- Use the 4 direction button to move to a desired letter and select the letter by pressing the SET button. Repeat this to enter multiple letters. You can enter up to 15 letters.

Enter a title, move the cursor to “POS” and press SET button. The entered title appears on the screen. Select the position to displayed the title on the screen by using the 4 direction button and press the SET button. When the position is determined, select “END” and press the SET button to return to the SPECIAL menu.

```

ABCDEFGHIJK
LMNOPQRSTU
VWXYZ▶()
- ■ / = & : ~ , .
1 2 3 4 5 6 7 8 9
→ ← CLR POS END

```

#### Note

- ▶ If you move the cursor to CLR and press the SET button, all the letters are deleted. To edit a letter, change the cursor to the bottom left arrow and press the SET button. Move the cursor over the letter to be edited, move the cursor to the letter to be inserted and then press the SET button.

# 2

- D-EFFECT : Select this to adjust the image.
  - FREEZE : OFF/ON
  - MIRROR : OFF/MIRROR/V-FLIP/ROTATE
  - D-ZOOM : x 2.0~64.0. (Analog video no picture when D-Zoom ON)
    - > PIP : ON/OFF
    - > D-ZOOM : x 2.0~64.0
    - > PAN&TILT : PIP / D-ZOOM
    - > DEFAULT : Reset the D-ZOOM setting to the factory default.
  - NEG. IMAGE : You can make the negative image effect.
  - RETURN : (RET/END)
- MOTION : If you connect an alarm device to this camera, you can monitor activity more efficiently, because a signal is generated by the camera whenever motion detection signal is output through the MD OUT port.
  - SELECT : You can select up to 3 area.
  - DISPLAY : (OFF/ON) You can use ↑, ↓, ←, → to adjust POSITION and SIZE.

- SENSITIVITY : 0 ~ 60.
- MOTION VIEW : ON/OFF
- DEFAULT : Reset the motion setting to the factory defaults.
- RETURN : (RET/END)
- PRIVACY : Hide an area you want to hide on the screen.
  - SELECT : You can select up to 8 area
  - DISPLAY : Determines weather to use the area selected. You can use ↑, ↓, ←, → to adjust POSITION and SIZE.
  - COLOR : Determines area color. You can select 16 kinds of color.
  - DEFAULT : Reset the privacy setting to the factory defaults.
  - RETURN : (RET/END)
- LANGUAGE : You can select the menu language according to your requirement.(ENG / JPN / CH1)

- DEFECT :
  - LIVE DPC : Dead pixel compensation on live.
  - LEVEL : 0 ~ 60.
  - STATIC DPC : Dead pixel compensation on static.
  - START : Close the lens then press the enter key.
  - LEVEL : 0 ~ 60.
  - SENS-UP : When it is night or dark, the camera automatically detects the light level and maintains a clear picture if this mode is activated.

#### Note

- ▶ If you press the SET button in “x3” or “x2” mode, you can adjust brightness by increasing or decreasing the shutter speed.(x2~x3)
- ▶ Note that the higher the zoom level, the brighter the screen, but the more likely it is that an after-image will appear.
- ▶ Although Noise, Spots, and Whitish symptoms may occur in SENSE-UP operation when the zoom level is increased, this is normal.

## 3

- RETURN : (RET/END)
  - RS485 : (Communication adjust menu )
- This function sets up the camera communication status when controlling the camera through an external control device.
- CAM ID : 0 ~ 255
  - ID DISPLAY : Display camera title on the screen.
  - BAUD RATE : 2400 / 4800 / 9600 / 19200 / 38400 bps.
  - RETURN : (RET/END)
- VERTION : 000000
  - RETURN : (RET/END)

### ADJUST

- SHARPNESS : As you increase this value, the picture outline becomes stronger and clearer. Adjust this appropriately depending on the sharpness of the picture.
- MONITOR : LCD / CRT monitor.
  - LCD MONITOR :
    - > GAMMA : USER / 0.45 / 0.50 / 0.55 / 0.60 / 0.65 / 0.70 / 0.75 / 0.80 / 0.85 / 0.90 / 0.95 / 1.00 value.
    - > BLUE GAIN : 0 ~ 100.
    - > RED GAIN : 0 ~ 100.
    - > RETURN : (RET/END)
  - CRT MONITOR :
    - > BLACK LEVEL : -30 ~ +30.
    - > BLUE GAIN : 0 ~ 100.
    - > RED GAIN : 0 ~ 100.
    - > RETURN : (RET/END)

- OSD :
  - TEXT COLOR : You can select 0 to 8 text color.
  - OUTLINE : ON/OFF
  - RETURN : (RET/END)
- LSC : (Lens Shielding Compensation)
- NTSC/PAL : You can select NTSC / PAL system.
- RETURN : (RET/END)

### RESET

- FACTORY : Reset the camera setting to the factory defaults.
- RETURN : (RET/END)

### EXIT

Press the SET button in the EXIT menu to save the current setting and exit the SET menu.

## 4