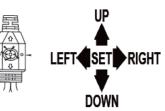
# DAY / NIGHT HD-SDI CAMERA WEATHERPROOF





# SPECIFICATION

ITEM NO.	IV-HDCM-500UF
IMAGE SENSOR	1/2.7" 2.1MP CMOS SENSOR
SCANNING SYSTEM	PRORESSIVE SCAN
RESOLUTION	2.1MEGAPIXEL 1080P, 1920x1080(30FPS)
SENSITIVITY(F1.2)	1.0LUX ( 0 LUX WITH IR ON )
LENS	3.6mm
EFFECTIVE PIXELS (HxV)	1944(H)x1920(V)
S/N RATIO	MORE THAN 50dB
SYNCHRONIZATION	INTERNAL
VEDIO OUTPUT ( BNC TYPE )	HD-SDI : 1.485G/s (SMPTE292M), 1.0Vpp-75Ohm
GAMMA CORRECTION	0.45
DAY / NIGHT	AUTO ONLY
O.S.D.	YES, BUILT-IN
DEFOG	ON / OFF ( FOG OR RAIN )
GAIN CONTROL	OFF / LOW / MID / HIGH
WHITE BALANCE	ATW / AWC>SET / INDOOR / OUTDOOR / MANUAL
BACK LIGHT COMPENSATION	OFF / BLC / HSBLC
SHUTTER	1/30 / 1/60 (1/50) / FLK / 1/2501/50000 / x2 / x3 / AUTO
IR LEDs & ILLUMINATION	14 IR LEDs, APPROXIMATELY 50 METERS IN IDEAL CONDITIONS(850nm)
PRIVACY FUNCTION	8
IP RATING	IP66
OPERATING CONDITIONS	TEMPERATURE : -10℃~+45℃, HUMIDITY : 95%RH
POWER SUPPLY	DC 12V (±10%)
POWER CONSUMPTION	IR OFF: 250mA(Max), IR ON: 600mA(Max)
DIMENSION L*W*H mm	67*85*218mm
NET WEIGHT	850g
IR LED	850nm*14

The above specifications are subject to change without notice.

# DAY / NIGHT HD-SDI CAMERA WITH WEATHERPROOF

# Model No: IV-HDCM-500UF

Main Feature :

- \* Auto Gain Control (AGC): This AGC function provides clear image in low light condition.
- \* Auto exposure (AE):
  - Camera may be used in any type of light source condition.
- \* Aperture Correction:

Aperture correction clarifies the picture.

\*Anti color rolling : This technology reduces color rolling under fluorescent lighting.

1997 (Sec. 17)

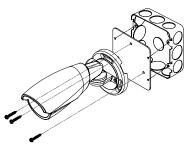
\*Vandal-proof and weatherproof housing made of stiff zinc alloy - Tested to resist vicious attacks up to 500lbs efficiently.

\* 3-axis adjustable mount with built-in keys mechanism for secure and firm lock.

## Installation :

Unremovable screw

Ceiling installation



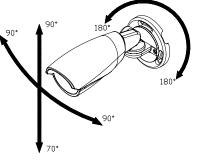
### Angle Adjustment:

- Step 1. Loosen the screw on the base andadjust rotationally.
- Each cog gears 18-degree.

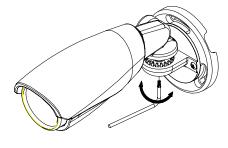
Step 2. Loosen the screw on the bracket and -

adjust the camera body vertically.

3D rotary bracket

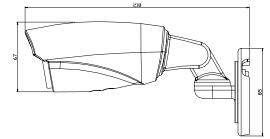


Step 3. Loosen the screw from the bottomand adjust the camera horizontally. Each cog gears 18-degree.



**Caution:** During the step1 or step2, do not loosen the screw completely.

# ( Loosen enough for adjustment purposes only)



- \*Connecting the power line and Video signal line, check power is DC 12V and Monitor on 75 Ohm state.
- \*Turn on the power and then you can see Video display on Monitor.

### CAUTION:

- 1. Please do not loosen the camera screw as it will cause malfunction.
- 2.Strong impact may deform the unit and may cause water damage.
- 3.Please use DC12V/350mA for power to avoid heat damage or insufficient power.
- 4.If water enters the unit or lens, and unusual heat or smell is found, please contact your distributor.
- 5.Design and specifications are subject to change without notice.

SET UP MENU	
LENS	· DC · MANUAL
EXPOSURE	<ul> <li>SHUTTER · AGC · SENS-UP · BRIGHTNESS</li> </ul>
	<ul> <li>ACCE · DEFOG · BACKLIGHT · RETURN</li> </ul>
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).

Adust the brightness appropriately for optimal screen brightness.

Adust the bightness appropriately for optimal screen bright

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  $\uparrow$ ,  $\downarrow$ ,  $\leftarrow$ ,  $\rightarrow$  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)

#### 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.
- ${\boldsymbol \cdot}$  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  $\uparrow$ ,  $\downarrow$ ,  $\leftarrow$ ,  $\rightarrow$  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.

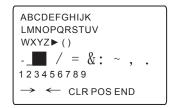
· SMART NR : OFF/ON (SMART NR working when 3DNR level >40)

·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 positon 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.



#### -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-Z00M : x 2.0~64.0
- > PAN&TILT : PIP / D-ZOOM
- > DEFAULT : Reset the D-ZOOM setting to the factory default.
- NEG. IMAGE : Yan can make the negative image effect.
- RETURN : (RET/END)
- $\cdot$  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 cam select up to 8 area
- DISPLAY : Determines weather to use the area selected. You can use  $\uparrow, \downarrow, \leftarrow, \rightarrow$  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.