Speed Dome
OSD Operation Manual

(Using VFH-8330M 2.0M 33X Zoom Module)

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- ■ ISP MENU

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2 . Speed Dome Main Menu(OSD MENU)

2.1 FOCUS MODE

AUTO	Automatically re-focus when object changes.
PUSHAF	Focus once at same location.
MANUAL	Fixed focus, no automatic re-focusing.

2.2 DISTANCE

0.1m	The distance of object is at 0.1 meter.
1m	The distance of object is at 1 meter.
2m	The distance of object is at 2 meter.
3m	The distance of object is at 3 meter.
6m	The distance of object is at 6 meter or above.

2.3 ZOOM SPEED

MIN / +1 / +2 / +3 / MAX

- Change optical zoom adjusting speed settings.

2.4 FOCUS SPEED

MIN / +1 / +2 / +3 / MAX

- Manually change re-focus adjusting speed settings.

2.5   LENS IRIS

CLOSE/F32/F22/F16/F11/F8.0/F5.6/F4.0/F2.8/F2.0/F1.6/OPEN

■   Change Aperture size.

2.6   ISP SETTING

Enter ISP MENU(Image Processing Menu) (Visit Chapter 3.ISP MENU for more info).)

2.7   LENS RESET

Switch to YES then hit ENTER to restore main menu default value (except ISP value), the system will also default its optic position. (Please avoid lens reset under strong lighting condition).

2.8   LENS ADJUST

Hit ENTER 6 times consecutively (on keyboard) to enter Developer Mode, this will disable some advance functions. (Please do not enter this mode without consulting your supplier)

2.9   EXIT

Leave OSD MENU Main Menu. (OSD MENU will close after 20 seconds of inactivity)

3 . Speed Dome ISP MENU

(Choose ISP SETTING in Main Menu to display below functions)

3.1 EXPOSURE

Press ENTER to display below functions:

3.1.1 SHUTTER : AUTO, 1/60, FLK, 1/240, 1/480, 1/1000, 1/2000, 1/5000, 1/10000, 1/50000, X2, X4, X6, X8, X10, X15, X20, X25, X30。

⇨ Adjust shutter exposure time (seconds), FLK is used for flicker control (need aperture changed accordingly)

⇨ X2 ~ X30 is slow shutter function (This function will increase image visibility in very dark environment).

3.1.2   AGC : 0 ~ 15

  ⇨ Auto Gain Control, it will automatically increase brightness when image becomes too dark, the noise signals could also be increased as a result.

3.1.3   SENS-UP: AUTO , OFF

  ⇨ OFF is to turn off this function.

  ⇨ AUTO is to automatically turn on SLOW SHUTTER function,press ENTER to adjust the illumination level settings (X2 ~ X30).

3.1.4   BRIGHTNESS : 1 ~ 100

  ⇨ Overall brightness setting.

3.1.5   D-WDR : ON, OFF

  ⇨ OFF is turn off Wide Dynamic Range function.

  ⇨ ON is turn on the Wide Dynamic Range function, this will improve image quality under strong overcastting shadow.

(a) Original Image   (b) DWDR ON

3.1.6   DEFOG : ON, OFF

⇨   OFF is turn off this function

⇨   ON is turn on the defog function, useful in image obscured by foggy, smoky and dusty condition.

3.1.7   RETURN：RET, END

⇨   Choose RET then press ENTER will go back to the previous page of ISP MENU.

⇨   Choose END then press ENTER will go back to Main Menu.

3.2   BACKLIGHT

OFF, WDR, BLC, HSBLC

Image processing functions.
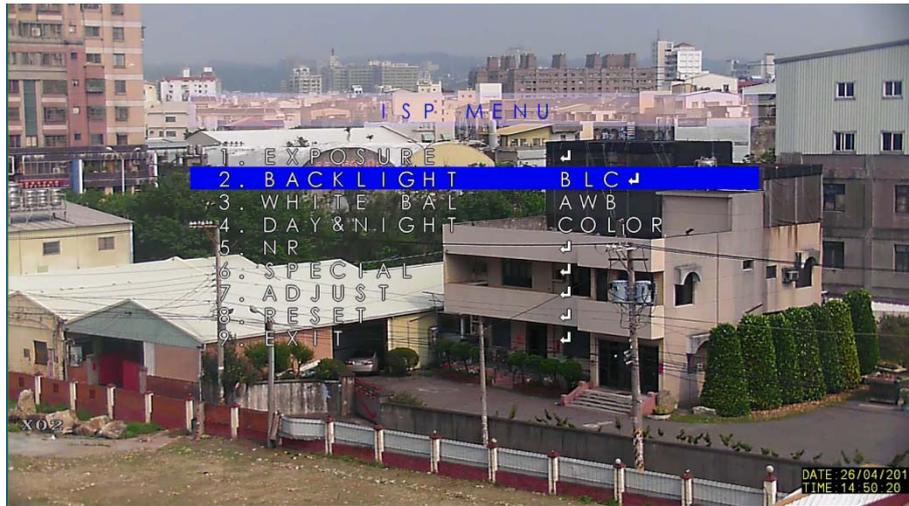
3.2.1   OFF: Turn off the Backlight compensation function.

3.2.2   WDR : GAIN, WDR OFFSET

Wide Dynamic Range compensation function, press ENTER to access WDR Settings below.

■   GAIN   : LOW, MIDDLE, HIGH, adjust WDR enhancement level.

■   WDR OFFSET : Adjust WDR calibration range between 0 ~ 60.

3.2.3 BLC : GAIN, AREA, DEFAULT.

Backlight compensation, press ENTER to access BLC settings.
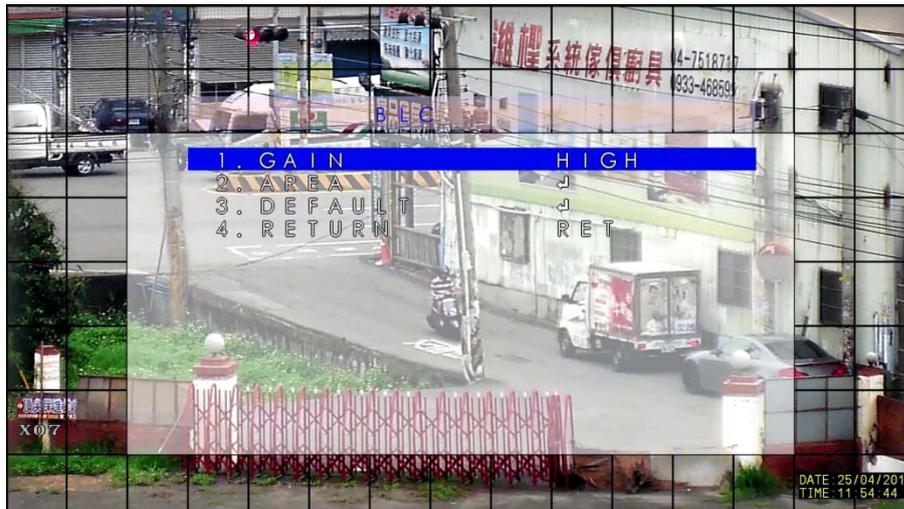
- GAIN : Choose LOW, MIDDLE, HIGH to adjust back light compensation level.
- AREA : Press ENTER to adjust compensating area, BLC function will start when the selected area becomes too dark.
- DEFAULT : Press ENTER to restore BLC setting to default value.

3.2.4 HSBLC : SELECT, DISPLAY, LEVEL, MODE, BLACK MASK, DEFAULT

When Highlight Suppression Back Light Compensation is enabled, camera will mask highlight sources in black color (suppress) and initiate BLC function, this function is ideal for license plate recognition. Press ENTER to access HSBLC settings.

- SELECT:AERA1, AERA2, AERA3, AERA4 select from 4 HSBLC

area types.
- DISPLAY: OFF is to turn off the HSBLC function for a certain area.

  ON press ENTER to turn on and adjust area sizes and positions.
- LEVEL: Select illumination threshold (0~100) to start HSBLC function.
- MODE:NIGHT NIGHT turn on HSBLC only at night time.

  ALL DAY turn on HSBLC for day and night.
- BLACK MASK: OFF is to turn off black mask function.

  ON is to turn on black mash function.
- DEFAULT: press ENTER to restore HSBLC setting to default value.

3.3 WHITE BAL

AWB, ATW, AWC->SET, INDOOR, OUTDOOR, MANUAL

Automatic White Balance setting page as below.
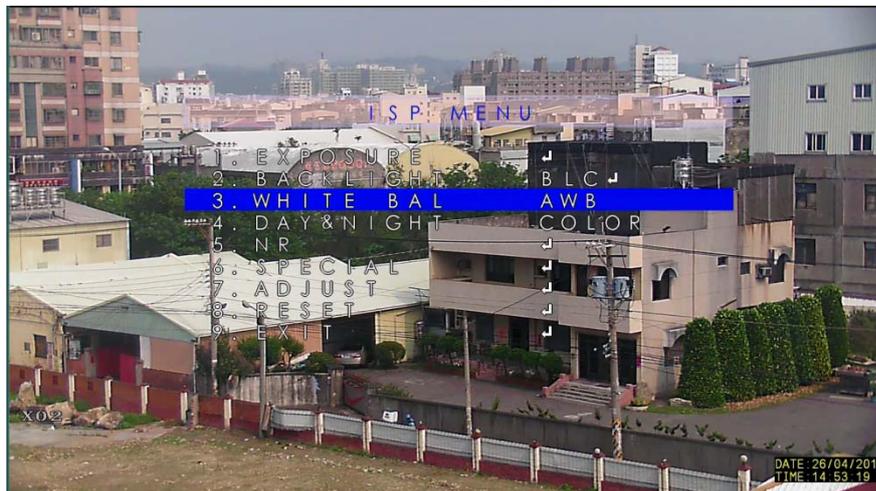
3.3.1 AWB: Auto White Balance, balance white shade level to make the picture closer to a balanced color temperature, the setting will adjust when reaching threshold.

3.3.2 ATW: Auto Tracking White Balance, the sensor will

automatically track changes in color temperature, and adjust until reaching white balance.

3.3.3 AWC->SET : Auto White Balance Capture, press to ENTER to capture current color temperature as AWB value.

3.3.4 INDOOR: Use the default indoor color temperature setting for AWB.

3.3.5 OUTDOOR: Use the default indoor color temperature setting for AWB.

3.3.6 MANUAL: Press ENTER to manually select blue/red ratio on color temperature scale.

BLUE Blue color inclination setting value 0~100.

RED　Red color inclination setting value 0~100.

3.4   DAY & NIGHT

Day & Night mode switches, this is control by the sensor
onboard Speed Dome automatically.

AUTO : Auto mode, let sensors onboard Speed Dome decide.

Color : When good lighting condition is present, Speed Dome will
        set to color mode and filter out infrared light.

B/W : When lighting condition is poor, Speed Dome will set to
        black & white, and switch to accept infrared light.

EXT: Exit without change, let Speed Dome sensor decide.

3.5   NR   Noise Reduction function.

Press ENTER to access Noise Reduction function setting page below.

2DNR : Choose OFF to turn off 2D de-noise function.

Choose ON to turn ON 2D de-noise function.

3DNR : Choose OFF to turn off 3D de-noise function.

Choose ON to turn on 3D de-noise function, press ENTER to access 3D de-noise function settings.

3.6   SPECIAL Special functions.

- ■ Press ENTER to access special function as page below.

3.6.1   CAM TITLE : Camera displayed name settings.

OFF Turn off camera name display.

ON Turn on camera name display, press ENTER to access

character selection as below page.

Choose ⇦ or ⇨ : Press ENTER to edit character.

Choose CLR: Press ENTER to clear all character selected.

Choose POS: Press ENTER to change camera name position.

Choose END: Press END to exist camera naming function.

3.6.2 D-EFFECT : Digital Effect settings.

Press ENTER to access digital effect settings as page below.

3.6.2.1   FREEZE : Choose ON to freeze on current frame, the
                camera does not record new frame.

3.6.2.2   MIRROR: OFF, MIRROR, V-FLIP, ROTATE

       Choose OFF: No rotate effect.

       Choose MIRROR : Display footage in mirror (left side
                becomes right side).

       Choose V-FLIP: Vertical Flip footage.

       Choose ROTATE : Rotate picture 180 degree.

P.S. Speed Dome will automatically choose suitable display method according to CPU performance.

3.6.2.3   D-ZOOM : Digital zoom function.

       OFF is to turn off the digital zoom.

       ON is to turn on the digital zoom, press ENTER to access
       digital zoom setting as below.

D-ZOOM : X1.0 ~ X62.0 times digital zoom adjustable.

PAN&TILT: Press ENTER to pan & tilt in digital zoom.

DEFAULT: Restore D-ZOOM default value as above screen.

P.S. 3DR / WDR / D-ZOOM / DIS function should not be enabled at the same time, the system may overload when more than one function is enabled for extended duration.

3.6.2.4   SMART D-ZOOM : Automatic digital zoom function.
OFF is turn off digital zoom function.
ON is turn on digital zoom function, Press ENTER to access Smart D-zoom criteria as below.

SELECT: Choose among AERA1, AERA2.

DISPLAY: Adjust area position.

SENSITIVITY: 0 ~ 60 triggering threshold for SMART D-ZOOM. (0 being most sensitive)

D-ZOOM: X1.0 ~ X62.0 of digital zoom when triggered.

TIME: Duration when Smart D-zoom triggered, 0 ~ 15 seconds selectable, D-zoom will return to normal when time expires.

DEFAULT: Restore SMART D-ZOOM default value.

3.6.2.5   NEG. IMAGE : Negative Image effect.

OFF is to turn off negative image effect.

ON is to turn on negative image effect.

P.S. Negative image is deployed when user do not wish to display the actual color, but actual object shape is required.

3.6.2.6 DIS : Digital Image Stabilization, alleviate image   shaking situation.

OFF is to turn off digital image stabilization.

ON is to turn on digital image stabilization.

P.S. There will be image delays when this function is enabled.

3.6.3 MOTION : Image Motion Trigger settings.

OFF is to turn off motion trigger function.

ON is to turn on motion trigger function，Press ENTER to access motion trigger setting as below.

SELECT: AREA1, AREA2, AREA3, AREA4 motion trigger area.

DISPLAY: OFF is to turn off motion trigger area，ON is to turn on motion trigger area and adjust area position and size.

SENSITIVITY: 0~60 motion changing value. (0 being most sensitive).

MOTION VIEW: OFF is to turn off motion block display, ON is to turn on motion block display.

DEFAULT: Press ENTER to restore the default value of all motion trigger area.

3.6.4 PRIVACY : Privacy Mask area settings.

OFF is to turn off privacy mask function.

ON is to turn on privacy mask function.

■ Press ENTER to access privacy mask effect settings as below.

SELECT : AREA1 ~ AREA8, total 8 privacy masks.

DISPLAY :

OFF	Turn off the mask function.
INV.	Inverted color scheme as mask.
MOSAIC	Mosaic as mask.
COLOR	Choose certain color as mask.

COLOR : 0~15, 16 color setting (When DISPLAY Choose COLOR).

TRANS : 0~3, 4 types of transparency (When DISPLAY Choose

COLOR).

DEFAULT : Restore all privacy mask to default value.

3.6.5   LANGUAGE : OSD language settings.

Press left and right arrow key to choose from 16 different languages, then press ENTER to ISP MENU, the system will then display the language selected.

ENG	English		SPA	Spanish
JPN	Japanese		POL	Polish
CHN1	Traditional Chinese		RUS	Russian
CHN2	Simplified Chinese		POR	Portuguese
KOR	Korean		NED	Nederland
GER	German		TUR	Turkish
FRA	French		HEB	Hebrew
ITA	Italian		ARB	Arabian

3.6.6 DEFECT : Defect Spot Patching settings.

Press ENTER to access defect spot patching settings as below.

- **LIVE DPC**

  OFF turn off dynamic defect spot patching function.

  AUTO turn on dynamic defect spot patching function，Press ENTER to set patching LEVEL. The system will automatically remove bright spot if AGC is over patching level, Vice versa if not.

- **STATIC DPC**

  OFF turn off static defect spot patching function.

  ON turn on static defect spot patching function, this function

works within 2048 spots (one over exposed pixel counts as one spot). Static defect patching will fail if the spots count exceed this number, please follow methods below to setup static defect spot patching.

(1) Main Menu \ LENS IRIS Set to CLOSE, this is to avoid light passing through ISP module.

(2) Main Menu \ ISP SETTING \ EXPOSURE \ DEFOG set to OFF。

(3) Main Menu \ ISP SETTING \ EXPOSURE \ AGC set to 1。

(4) Main Menu \ ISP SETTING \ SPECIAL \ DEFECT \ LIVE DPC set to OFF。

(5) Main Menu \ ISP SETTING \ SPECIAL \ DEFECT \ STATIC DPC set to ON。

Press ENTER to access STATIC DPC settings as below.

(6) Adjust SENS-UP (SLOW SHUTTER) level, this means when SLOW SHUTTER is enabled, the number of defect spot present.

(7) Adjust AGC level, means the number of defect spot present when AGC started.

(8) Adjust LEVEL, means the defect spot threshold. When defect spot is brighter then this level, the system will start patching procedure.

(9) Next move to START, then press ENTER, the "Close IRIS" notification will appear. Then press ENTER to start defect spot patching procedure.

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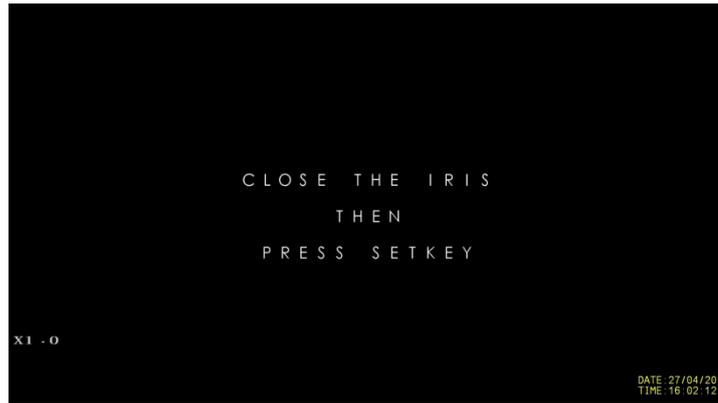
(10) The system will display all detected defect spots. Please note that the procedure will fail if defect spot exceed 2048 spots. Please go back to step (6), (7), (8) to adjust until the defect spot is within 2048 dots.

(11) The screen will be displayed as below when defect patching completed.
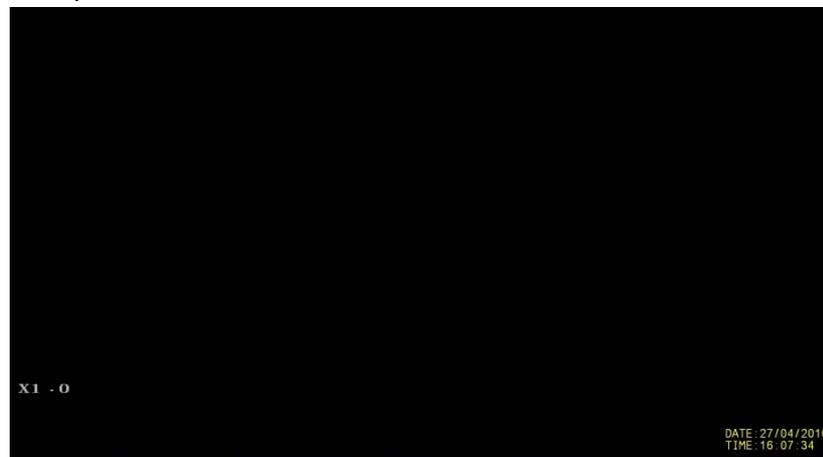
3.7   ADJUST

Adjust   function.

3.7.1   SHARPNESS : Image sharpness, adjust between values of 0 ~ 15 .

3.7.2 MONITOR: LCD, CRT

Choose monitor between LCD and CRT (analogue).

3.7.2.1 LCD : LCD monitor (include computer monitor).

GAMMA：Image display composition adjustment.

USER/USER+Y/0.45/0.5/0.55/0.60/0.65/0.70/0.75/0.80

/0.85/0.90/0.95/1.00/AUTO

ADAPT.LEVEL	0~100
BLUE GAIN	Blue color ratio.
RED GAIN	Red color ratio.

3.7.2.2 LSC : Lens Shading Compensation function. The four corners may appear darker when lighting condition is poor. LSC function can be used to reduce the dark edges.

ON	Enable.
OFF	Disable.

3.7.2.3　VIDEO. OUT: Video display format (PAL/NTSC).

NTSC	1080P 30 FPS
PAL	1080P 25 FPS

3.7.3　RESET : FACTORY

Restore original default value.

Press ENTER at the RESET selection to bring up restore original default value as below.

Choose RESET: Restore original default value .

Choose CHANGE: Set current settings as original default value (all the settings).

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