

USER MANUAL

WIDE DYNAMIC RANGE OSD VARI-FOCAL VANDAL PROOF ICR DAY/NIGHT COLOR DOME CAMERA HIGH RESOLUTION / 45M IR DISTANCE

12VDC + 24VAC

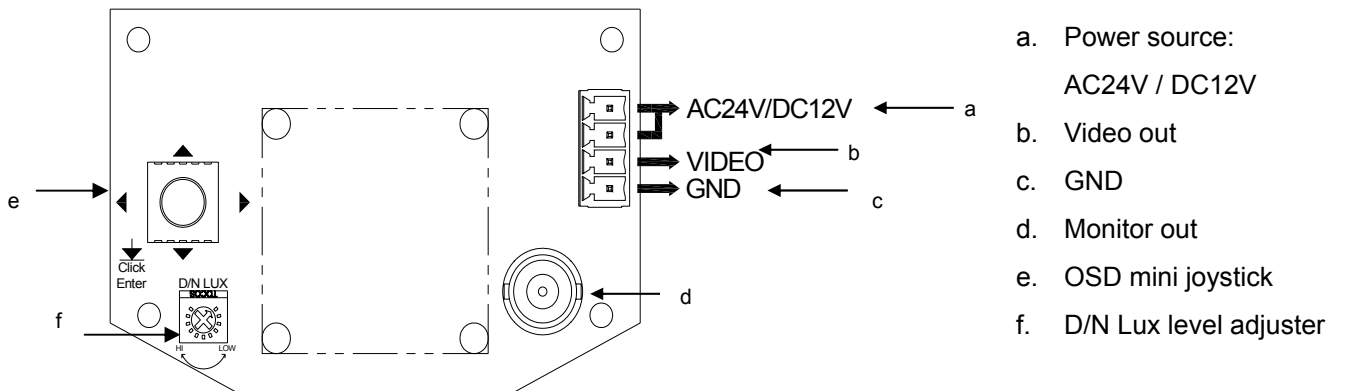
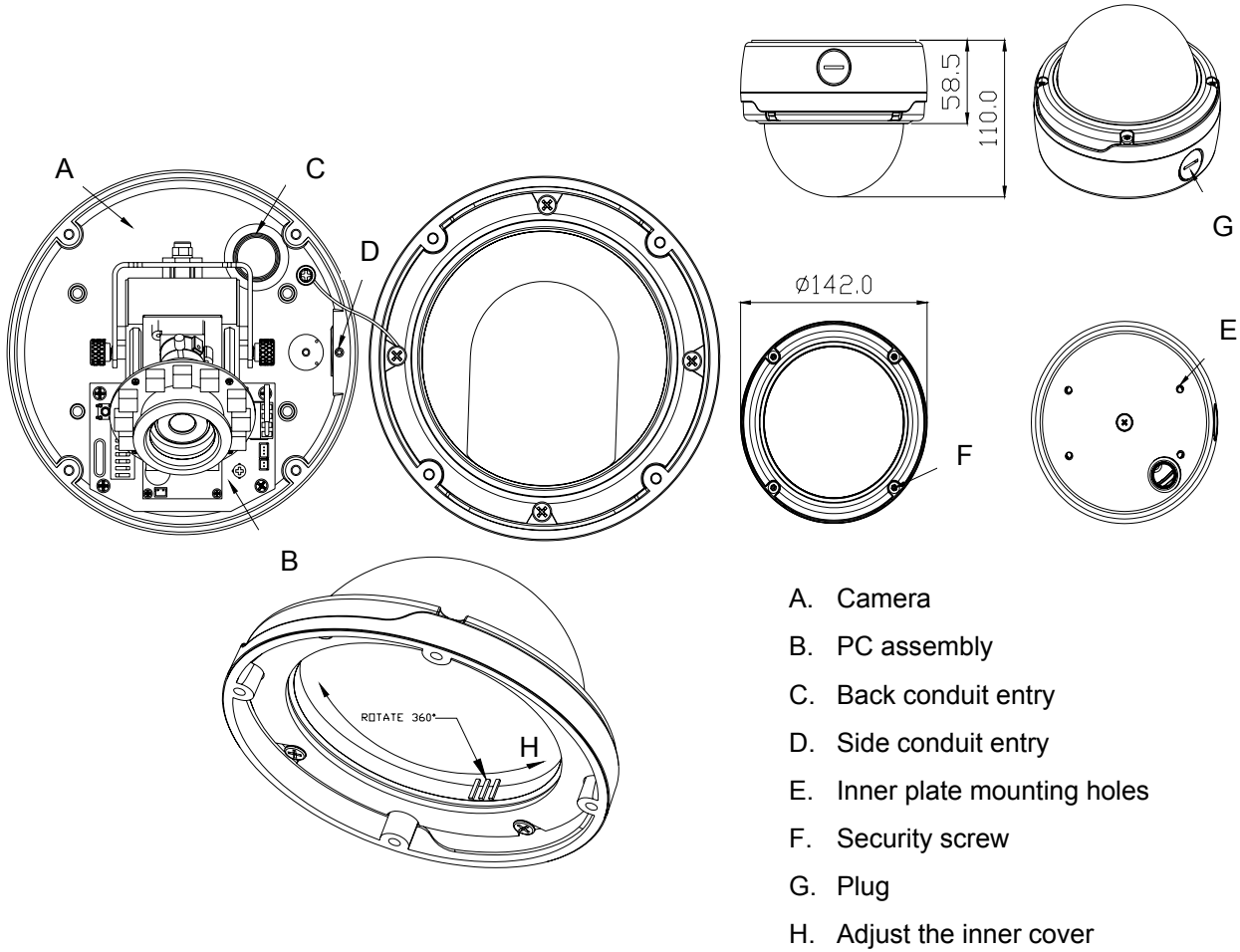
1. General description

This 1/3" RGB DSP *Wide Dynamic Range Camera*, with high resolution picture elements, and advanced Digital Signal processor to provide an unprecedented optimal image with vivid and stable true color picture up to 540TVL.

2. Features

- a. *Wide Dynamic Range*: filtering intense back light surrounding a subject and thus produce viewable background with clear subject up to max 120dB contrast level.
- b. *Resolution*: performing of 540TV line.
- c. *Sense Up*: By effectively increase exposure time in a low light condition; therefore increases the sensitivity of the camera to produce a crystal clear image, up to 32X.
- d. Smart software NTSC/PAL dual system selectable.
- e. *White Balance*: Auto Tracing White balance (ATW) allowing the camera to adjust color tone automatically according to the color temperature of the light source illuminating the subject.
- f. Ultra Day/Night Lux level adjustable design.
- g. Installation friendly two way video output.
- h. User selectable sync Internal 1 or Internal 2 or external *Line-lock* mode.
- i. *On Screen Display* (OSD) easy control.
- j. True Day/Night OLPF switching Mechanical IR cut filter built-in.
- k. Equipped with 9~22mm auto-iris DC drive lens.

3. Name of parts and functions



4. **OSD** functions: push on the “Enter” bottom for two seconds to shown the OSD screen on the monitor, and the following manual appears:

WDR MODE: filtering intense back light surrounding a subject and thus produce viewable background with clear subject up to max 120dB contrast level.

EXPOSURE: Setting of Auto Gain Control, Slow Shuttle (Sense Up), WD Range and Backlight Zone.

WHITE BALANCE: Auto Tracing White balance (ATW) allowing the camera to adjust color tone automatically according to the color temperature of the light source illuminating the subject.

VIEWING: Settings of mirror effects, sharpness, Gamma and resolution presets

SETUP: Video I/O, ID setup, Day/Night setup, AI threshold

SAVE/RESTORE: Restore and set user’s setting or default factory settings

EXIT: Exit of OSD manual

Details break down chart:

4.1. **WDR mode: Normal**

Normal/Indoor/Outdoor/Fluor1/Fluor2/NTSC50Hz

Selections of the above for appropriate camera environments settings

4.2. **Exposure:**

4.2.1 Gain Mode: Slow Shutter

4.2.1.1 AGC

4.2.1.1.1. AGC Medium

Low/Medium/High/Custom

Custom

Bias 0, -18~18

Limit 34, 0~60

Prev./Save/Cancel

4.2.1.1.2. Prev./Save/Cancel

4.2.1.2 Manual

Gain 0, -42~60

Prev./Save/Cancel

4.2.1.3 Slow Shuttle (Sense Up)

Slow Shuttle 2X: 2X/4X/8X/16X/32X/Off

DE-Chroma 2X: 2X/4X/8X/None

DE-Sharp 2X: 2X/4X/8X/None

Prev./Save/Cancel

4.2.2 WD Range

4.2.2.1. Auto

4.2.2.1.1. Range Ctrl: Normal

Low/Normal/High/Custom

Custom

Bias 0, -36~36

Limit 34, 0~60

Prev./Save/Cancel

4.2.2.12. Prev./Save/Cancel

4.2.2.2 Manual

Value 5: 0~10

Prev./Save/Cancel

4.2.3 B.L. zone

On or Off: select the block zone for setting back light area. When into the BL Zone, a square appears, push enter-bottom to change its color when:

B.3.1 White: moving square by pushing up down left right.

B.3.2 Green: expanding square by pushing up down left right.

B.3.3 Red: squeezing square by pushing up down left right.

*Push on the "Enter" bottom for two seconds to exit the BL zone.

4.2.4 Transition Normal

Slow/Normal/Fast

4.2.5 Prev./Save/Cancel

Save changes or cancel or go back to previous page

4.3. White Balance

4.3.1 Mode ATW Extend

4.3.1.1 ATW Normal

White Balance Limit

Low limit 2K~2000~5.5K

High limit 5.5K~7500~11K

4.3.1.2 ATW Desat.

White Balance Limit

Low limit 2K~2000~5.5K

High limit 5.5K~7500~11K

4.3.1.3 AWB

Push AWB Confirm

Save AWB & All Changes

Cancel

4.3.1.4 Manual

4.3.1.4.1. ADJ Mode Color Temp.

Color Temp.

Color Temp. 2K~5000~11K

Prev./Save/Cancel

R/B

Red -18, -20~20

Blue 13, -20~20

Prev./Save/Cancel

4.3.1.4.2. Prev./Save/Cancel

4.3.2 MGNTA Ctrl On

Off/On/Custom

Custom

MGNTA Ctrl 0~11~100

Prev./Save/Cancel

4.3.3 WB BIAS -2K~0~2K

4.3.4 Transitions

ATW SLEW 10, 1~100

HYST 5, 1~100

Prev./Save/Cancel

4.3.5 Prev./Save/Cancel

4.4. Viewing

4.4.1 H-Mirror Off

On/Off

4.4.2 Gamma Mode Auto

Auto/Manual/Off

Manual

Gamma 25~45~100

Prev./Save/Cancel

4.4.3 Sharpness

D.3.1 Detail Boost Auto

Auto/Off

D.3.2. Noise Reduction On

On/Off

On

CW NR 183 , 0 ~ 255

D.3.3 Sharpness, -8~0~8

D.3.4 Aperture, -8~0~8

D.3.5 Prev./Save/Cancel

4.4.4 Chroma

BIAS 0, -8~8

Prev./Save/Cancel

4.4.5 Resolution Normal1

Normal1 / Advance1 / Normal2 / Advance2

4.4.6 Prev./Save/Cancel

4.5. Setup

4.5.1 Video I/O

4.5.1.1 Video Standard NTSC or PAL

4.5.1.1.1 NTSC/PAL

NTSC

a. Setup On

On/Off

b. Video Level, 80~110~150

c. Color Bar Off

Off/On

4.5.1.1.2 PAL

a. Video Level 80~110~150

b. Color Bar Off

Off/On

c. Prev./Save/Cancel

4.5.1.2 SYNC INT

INT/INT2/LL

Line lock

V-Phase, 0~519~624

Prev./Save/Cancel

4.5.1.3 Prev./Save/Cancel

4.5.2 ID Setup

Camera ID Setup

4.5.2.1 ID Display Off

On/Off

4.5.2.2 Camera ID: _____

4.5.2.3 ID Position Up-Left

Up-left/Up-center/Up-right/Down-left/Down-right

4.5.2.4 Prev./Save/Cancel

4.5.3 Day/Night Setup

Day/Night Setup

4.5.3.1. D/N control Auto

Auto/Color/B/W

4.5.3.2. Gain Boost Off

Off/On

4.5.3.3. Prev./Save/Cancel

4.5.4. AI threshold -42, -18, 60

4.5.5 Prev./Save/Cancel

4.6. **Save/Restore**

4.6.1 Restore user settings

4.6.2 Save user settings

4.6.3 Restore factory settings

4.6.4 Reset Camera

4.6.5 Prev.

5. **Exit:** exit of OSD manual

6. Specifications

Power requirements	12V DC + 24V AC
Synchronization	INT / Line-Lock (for AC POWER)
Image device	1/3" RGB DSP
Picture elements	720(H) x 540(V)
Dynamic Range	102 dB typical, 120 dB max
Signal System	NTSC/PAL Selectable
Scanning system	525/60 (NTSC), 625/50 (PAL)
Horizontal Resolution	540 TVL
Vertical Resolution	400 TVL
Min. illumination	0.5 lux @F1.8(b&w mode, 30IRE, IR LED OFF)
	0 lux @F1.8(b&w mode, 30IRE, IR LED ON)
IR wavelength	700~1100nm
OLPF switching	Auto switching
Signal-to-noise ratio	Better than 50dB
Gain	AGC ON/OFF, fully programmable
Gamma Compensation	Auto / Manual / OFF
Resolution	4 modes (Normal1 / Advance1 / Normal2 / Advance2)
White balance	5 modes
Slow Shutter	Max: 32X
Mirror	Horizontal ON/OFF
White balance Range	2000°k~11000°k
DNR	ON/OFF, fully programmable
Lens	9~22mm auto-iris DC drive lens
Video output	Composite 1.0 V p-p at 75Ω
Power Consumption	7.2 W (IR LED ON)
Operating temperature	-10°C ~50°C (14 ~ 122)
Vandal proof	10 pounds of sledgehammer durability

*Specifications are subject to change without notice.

Warning : To prevent fire or electric shock hazard, do not expose the appliance to rain or moisture.