



## Alpha Mega Series Indoor Dome Cameras



### Alpha MEGA

- 1000 TV Lines of Resolution (1.39 MegaPixel)
- 1/2.9" CMOS Sensor
- Highly Advanced EN773E Digital Signal Processor
- 3.6mm Fixed & 2.8-12mm Varifocal Lens Options
- Available with 35 IR LEDs (120' Range)
- Advanced OSD Functions: WDR, 3D DNR, DSS, DIS, Sens-up, Motion Detection, Privacy
- Secondary Video Output (Cable Included)
- 3-Axis Mount for Optimum Viewing Angle
- 12VDC/24VAC Dual Voltage Operation

# VITEK

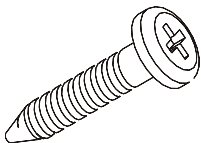
## TABLE OF CONTENTS

BOX CONTENTS / MOUNTING ACCESSORIES	2
AVAILABLE MODELS	3
VTD-A4F/IM INSTALLATION	4
VTD-A2812/IM INSTALLATION	5
VTD-AR2812/IM INSTALLATION	6
INSTALLATION TIPS	7
SETUP MENU	8
OSD OPERATION	9-19
DIMENSIONS	20
SPECIFICATIONS	21-23
NOTES	24-26

## BOX CONTENTS

- 1) Alpha Mega Dome Camera
- 2) Mounting Accessories
- 3) Secondary Video Output Cable
- 4) This instruction Manual & Mounting Template

## MOUNTING ACCESSORIES



### Self Tapping Screws

For attaching the housing base to a solid surface.

Type #: Phillips ST4x30

Qty: 4 (2 screws - VTD-A4F/IM)



### Secondary Video Output Cable

To be used with a service monitor for adjusting the angle, focus and zoom.

Qty: 1

## AVAILABLE MODELS

### **VTD-A4F/IWM**

Alpha Mega Series 1000 TVL (1.39MP) Indoor Fixed 3.6mm  
Dome - Ivory

### **VTD-A4F/IBM**

Alpha Mega Series 1000 TVL (1.39MP) Indoor Fixed 3.6mm  
Dome - Black

### **VTD-A2812/IWM**

Alpha Mega Series 1000 TVL (1.39MP) Indoor 2.8-12mm Varifocal  
Dome - Ivory

### **VTD-A2812/IBM**

Alpha Mega Series 1000 TVL (1.39MP) Indoor 2.8-12mm Varifocal  
Dome - Black

### **VTD-AR2812/IWM**

Alpha Mega Series 1000 TVL (1.39MP) Indoor 2.8-12mm Varifocal  
Dome & 35 IR LEDs - Ivory

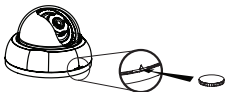
### **VTD-AR2812/IBM**

Alpha Mega Series 1000 TVL (1.39MP) Indoor 2.8-12mm Varifocal  
Dome & 35 IR LEDs - Black

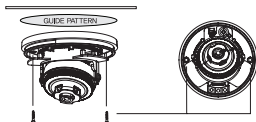
# VTD-A4F/IM INSTALLATION

## 1. Opening

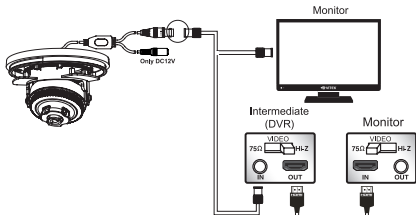
Use a coin to open the cover.



## 2. Place the camera in the desired location and install using the screws supplied.



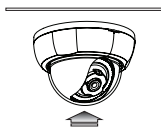
## 3. Connecting Cables



## 4. Pan / Tilt (3Axis) Controls



## 5. Closing the cover



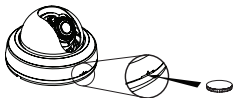
\* See Installation Tips on page 7

# VTD-A2812/IM INSTALLATION

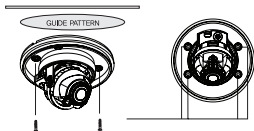
## INSTALLATION

### 1. Opening

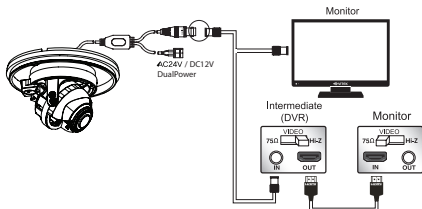
Use a coin to open the cover.



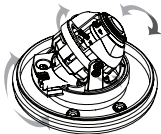
### 2. Place the camera in the desired location and install using the screws supplied.



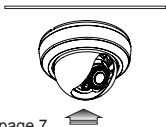
### 3. Connecting Cables



### 4. Pan / Tilt (3Axis) Controls



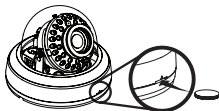
### 5. Closing the cover



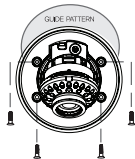
\* See Installation Tips on page 7

# VTD-AR2812/IM INSTALLATION

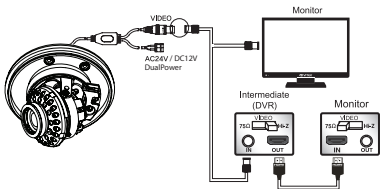
Use a coin to open the cover.



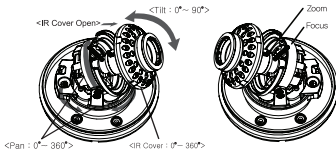
2. Place the camera in the desired location and install using the screws supplied.



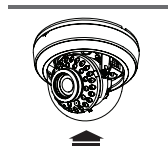
3. Connecting Cables



4. Pan / Tilt (3Axis) Controls



5. Closing the cover



\* See Installation Tips on page 7

## **INSTALLATION TIPS**

### **1.) Power Consumption - Amperage/Voltage**

It is of utmost importance that the proper Voltage and Amperage is used when applying power to your VITEK Alpha Series Dome Camera. They can be powered by either 12V DC or 24V AC (except for the model VTD-A4F/IM - 12V DC only). Always use a UL Listed power transformer.

The Voltage must be measured at the camera location. It is very important that the camera receives no less than the required Voltage or it will be "Starved" and eventually die out. Cameras with Infrared LEDs require substantially more Amperage than others so please refer to the Specifications (page 21-23) for the camera you are installing.



# SETUP MENU

## MENU

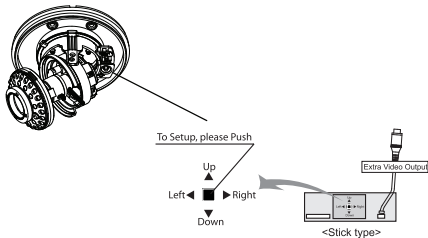
<b>SETUP MENU</b>
<b>EXPOSURE</b> SENS-UP BRIGHTNESS LENS SHUTTER AGC RETURN
<b>WHITE BAL</b> AUTO AUTOext PRESET MANUAL
<b>IMAGE</b> SHARPNESS DEFOG D-ZOOM MIRROR FLIP PRIVACY SHADING COLOR GAIN ACE RETURN
<b>BACKLIGHT</b> OFF HLC BLC WDR
<b>DAY&amp;NIGHT</b> MODE RETURN (AUTO, B/W, COLOR, EXTERN)
<b>DNR</b> OFF LOW MIDDLE HIGH
<b>MOTION</b> MOTION ALARM QUICK ZOOM RETURN
<b>SYSTEM</b> SERIAL GAMMA PEDESTAL VIEW ANGLE CVBS LANGUAGE FOCUS ADJ FACTORY SET RETURN

Above specifications may be changed without any notice.

# OSD OPERATION

## SETTINGS

Settings can be made using the Joystick located on the rear of the camera.



1. Please press joystick down

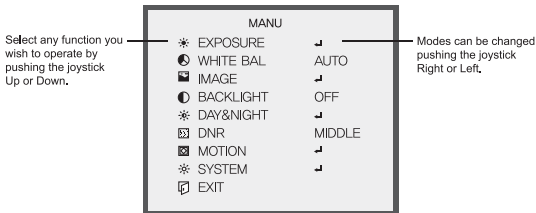
- Settings can now be made, The Main Menu is displayed on monitor.

2. Please select any function you wish to activate by pushing the joystick Up or Down

- The cursor position will appear yellow on your screen.  
Push the joystick up or down to highlight the function you wish to change.

# OSD OPERATION

## MENU



3. Please press the joystick Right or Left if you wish to change mode.
  - When the joystick is pressed Right or Left, available values and mode are displayed in order. Please keep **pressing** the joystick until you get the mode you wish.
4. Please select "EXIT" and then press the joystick to finish the setting.

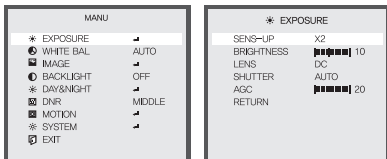
## MAIN MENU

EXPOSURE, WHITE BAL, IMAGE, BACKLIGHT, DAY&NIGHT, DNR, MOTION, SYSTEM, EXIT control can be selected.

# OSD OPERATION

## \* EXPOSURE

- When the Main Menu screen is displayed move highlighted area to EXPOSURE using the up/down of the joystick and then press down on the joystick to enter EXPOSURE Mode.
- Highlight section to change by using joystick Up/Down. After section is highlighted us joystick Left/Right to adjust settings.

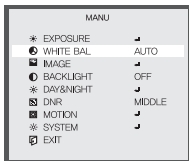


- SENS\_UP : OFF / X2 / X4 / X8 / X16 / X32 / X60
  - Brighter video can be obtained by increasing the exposure time at night with SENS-UP. SENS-UP is the maximum integration of frames by DSS(Digital Slow Shutter) in low light.
  - When "SENS\_UP" is on, shutter cannot be adjusted.
- BRIGHTNESS: Adjusts the brightness of video(0~20).
- LENS: When using the built-in lens, select either Manual (default) or DC.
  - DC MODE : OUTDOOR / INDOOR / DEBLUR
  - MANUAL MODE : DEBLUR / NORMAL /
- SHUTTER : AUTO / MANUAL / FLICKER
  - When selecting Manual choose which Shutter speed to use.  
(1/60, 1/120, 1/240, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/16000, 1/30000, 1/60000)
- AGC (Auto Gain Control)
  - The higher the gain level, the brighter the screen - but the higher the noise.
- RETURN

# OSD OPERATION

## WHITE BAL

- Use the White Balance function to adjust the screen color.
- When in the MAIN MENU highlight WHITE BAL by using the joystick up/down.
- Select mode by moving joystick left or right.



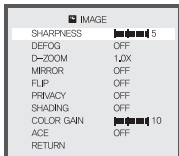
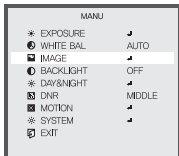
- AUTO  
: Default - This function continuously adjusts the white balance automatically to adapt to changes in lighting conditions.
- AUTOext  
: This mode is for use in Halogen or extremely bright white light.
- PRESET  
: This function adjusts the white balance regardless of the subject conditions.
- MANUAL  
KELVIN : LOW / MIDDLE / HIGH  
R-GAIN : Joystick left to decrease, joystick right to increase.  
B-GAIN : Joystick left to decrease, joystick right to increase.  
RETURN

### NOTE

- Under the following conditions the WHITE BALANCE function may not operate properly. In such cases, please select the AWB mode.
  - When the object's surroundings have a very high color temperature
  - When the object's surroundings are dark

# OSD OPERATION

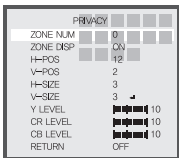
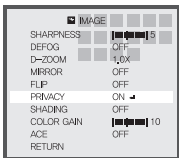
## IMAGE



- SHARPNESS : Adjust from 0~10 by using joystick left or right.
- DEFOG : MODE (you can select AUTO / MANUAL) , LEVEL (you can select LOW / MIDDLE / HIGH)
- DZOOM : You can use a digital zoom of 1,0 X ~ 8,0 X
- MIRROR / FLIP : Used to inverse the picture.



- PRIVACY : This mode conceals the areas you do not wish to appear on the screen,

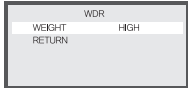
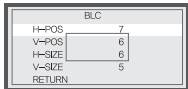
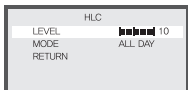
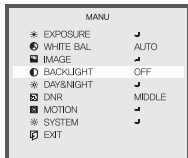


- SHADING : When using wide angle lens, you can compensate darkness of corners on the screen.
- COLOR GAIN : Adjust from 0~20 by using joystick left or right.
- ACE (Adaptive Color & Contrast Enhancement) :  
OFF, LOW, MIDDLE, HIGH, ACE performs an image enhancement process to enhance the image by changing the brightness value.

# OSD OPERATION

## BACKLIGHT

When there is a strong backlight behind the object, clear images of the background as well as the object can still be obtained by using the BACKLIGHT function.



- OFF : Turn off 'BACKLIGHT' function
- HLC : LEVEL - Adjust from 0~20 by using joystick left or right  
MODEL - you can choice NIGHT ONLY or ALL DAY.
- BLC
  - ┌ H-POS : Adjust from 0~20 with 0 being the left most
  - ├ V-POS : Adjust from 0~20 with 0 being the top area.
  - ├ H-SIZE : Adjust from 0~20 with 0 being the smallest.
  - └ H-SIZE : Adjust from 0~20 with 0 being the smallest.

- WDR (Wide Dynamic Range)

This function extends the gain range of the screen that is used by the camera to take a simultaneous picture of both indoor and outdoor. It improves contrast of the picture in outdoor scenes as well as indoor. Video image is processed from two images by shutter (long and short shutter) in a field to provide the best dynamic range. Highlight area is compensated by the short shutter and dark area is compensated by the long shutter. Final video has less contrast compared to the conventional camera which does not have WDR function.



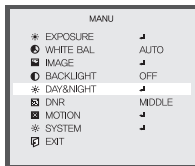
WDR (ON)



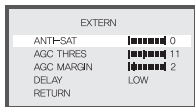
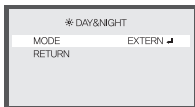
WDR (OFF)

# OSD OPERATION

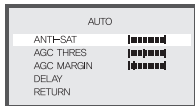
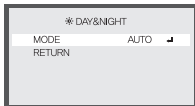
## \* DAY&NIGHT



- EXTERN : DAY or NIGHT is determined by the built-in light photo sensor. Camera with IR LED must be set to EXTERN



- AUTO : Used when DAY or NIGHT is determined by light level through the lens and DAY from/to NIGHT is switched automatically by the scene brightness.



- COLOR : This picture is always displayed in color.
- B&W : The picture is always displayed in black and white,  
You can turn on or off the burst signal on B/W mode.

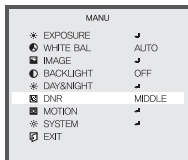


# OSD OPERATION

## DNR

DNR (Digital Noise Reduction)

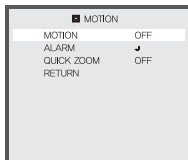
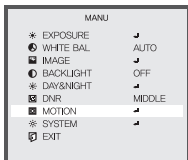
- DNR is a technique of removing image noise from a video signal by applying a digital comb filter. It makes images clearer and reduces video file size.



- OFF : DNR function does not operate,
- LOW / MIDDLE / HIGH : You can select 'LOW', 'MIDDLE' or 'HIGH' menu as DNR condition,

## MOTION

This Product has a feature that allows you to observe movement in 3 different areas on the screen and the word MOTION will appear on screen when motion is detected.



## OSD OPERATION

MOTION	
MOTION	ON
ALARM	
QUICK ZOOM	OFF
RETURN	

MOTION	
DET. SETTING	
WINDOW TONE	0
WINDOW ZONE	0
WINDOW USE	OFF
DET H-POS	1
DET V-POS	2
DET H-SIZE	16
DET V-SIZE	12
RETURN	

DET. SETTING	
SENSITIVITY	5
OBJ. KEEP LV	0
MOTION EST.	0
SIGNAL OUT	OFF
RETURN	

### - DET. SETTING

- SENSITIVITY: Adjust from 0~20 by using joystick left or right.
  - OBJ. KEEP LV: Adjust from 0~60 by using joystick left or right.
  - MOTION EST: Adjust from 0~20 by using joystick left or right.
  - SIGNAL OUT : You can select ON / OFF
  - RETURN
- WINDOW TONE: Adjust from 0~6 by using joystick left or right.
  - WINDOW ZONE: Adjust from 0~4 by using joystick left or right.
  - WINDOW USE : You can select ON / OFF
  - DET H-POS: Adjust from 0~60 by using joystick left or right.
  - DET V-POS: Adjust from 0~40 by using joystick left or right.
  - DET H-SIZE: Adjust from 0~40 by using joystick left or right.
  - DET V-SIZE: Adjust from 0~40 by using joystick left or right.
  - RETURN

MOTION	
MOTION	OFF
ALARM	
QUICK ZOOM	OFF
RETURN	

ALARM	
SHAKING	ON
SHAKE SCALE	10
BRIGHT CHG.	ON
BRIGHT SCL.	3
RETURN	

## OSD OPERATION

### - ALARM

- SHAKING : You can select ON / OFF
- SHAKE SCALE: Adjust from 0~20 by using joystick left or right.
- BRIGHT CHG. : You can select ON / OFF
- BRIGHT SCL: Adjust from 0~20 by using joystick left or right.
- RETURN

MOTION	
MOTION	OFF
ALARM	↓
QUICK ZOOM	ON ↓
RETURN	

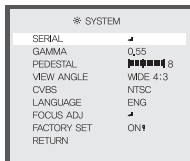
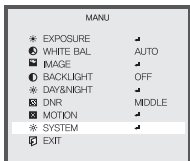
QUICK ZOOM	
MOVING	30 / 60sec
ZOOM IN	30 / 60sec
STANDBY	30 / 60sec
SYNCHRONOUS	OFF
TRACKING	OFF
REPEAT	OFF
RETURN	

### - QUICK ZOOM

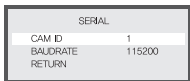
- MOVING : 0/60sec ~240/60sec
- ZOOM IN : 0/60sec ~240/60sec
- STANDBY : 0/60sec ~240/60sec
- SYNCHRONOUS : You can select ON / OFF
- TRACKING : You can select ON / OFF
- REPEAT : You can select ON / OFF
- RETURN

# OSD OPERATION

## \* SYSTEM



- SERIAL: N/A



- CAM ID : You can select ID from 0 to 255 when using remote control.
- BAUDRATE : 2400, 4800, 9600, 57600, 115200

- GAMMA : You can select (0,45 / 0,5 / 0,55 / 0,6 / 0,65)
- PEDESTAL: Adjust from 0~20 by using joystick left or right.
- VIEW ANGLE : You can select (WIDE 4:3 / WIDE 16:9 / NORMAL)
- CVBS : You can select (NTSC / PAL)
- LANGUAGE : ENG / CHN / CHN(S) / JPN / KOR /
- FOCUS ADJ

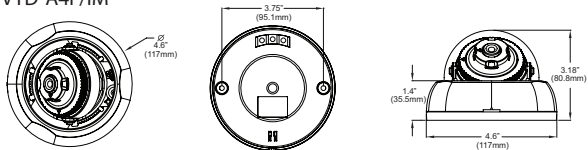


After entering FOCUS ADJ a box with 3 different boxes within will appear on screen. Each box is to aid in focusing of different scene contrasts, LEFT box for low contrast MIDDLE box for medium contrast and RIGHT box for high contrast. Adjust focus so no green will be in box of selected contrast.

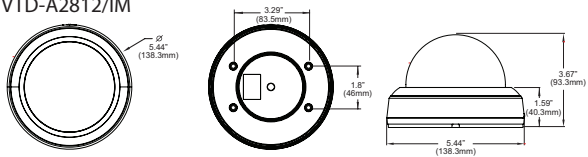
- FACTORY SET : Factory initialize
- RETURN

## DIMENSIONS

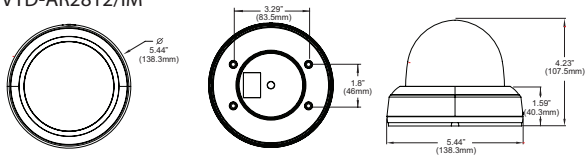
VTD-A4F/IM



VTD-A2812/IM



VTD-AR2812/IM



## SPECIFICATIONS

### VTD-AF4/IM

Image Device	1/2.9" CMOS Sensor
Resolution	1000 TV Lines
Min. Illumination	0.1 Lux (B/W) / 1.0 Lux (Color)
Effective Pixels	1305 x 1049 (1.39 MegaPixel)
S/N Ratio	More Than 52dB (AGC Off)
Smart Motion Zoom	YES
3D DNR	YES
Defog	YES
Standard Lens	3.6mm Fixed Lens
Power Source	12VDC Operation
Power Consumption	120 mA
Environmental	14°F~ 122°F (-10°C~50°C) at 30%~80% RH
Dimensions	4.6" x 3.07" (117mm x 78mm)
Weight	0.5lbs (227g)

## SPECIFICATIONS

### VTD-A2812/IM

Image Device	1/2.9" CMOS Sensor
Resolution	1000 TV Lines
Min. Illumination	0.1 Lux (B/W) / 1.0 Lux (Color)
Effective Pixels	1305 x 1049 (1.39 MegaPixel)
S/N Ratio	More Than 52dB (AGC Off)
Smart Motion Zoom	YES
3D DNR	YES
Defog	YES
Standard Lens	Varifocal 2.8-12mm IR Corrected
Power Source	Dual Voltage 12VDC/24VAC Operation
Power Consumption (12VDC)	210 mA
Power Consumption (24VAC)	230 mA
Environmental	14°F~122°F (-10°C~50°C) at 30%~80% RH
Dimensions	5.45" x 3.7" (138.30mm x 93.76mm)
Weight	0.62lbs (272g)

## SPECIFICATIONS

### VTD-AR2812/IM

Image Device	1/2.9" CMOS Sensor
Resolution	1000 TV Lines
Min. Illumination	0.1 Lux (B/W) / 1.0 Lux (Color) / 0 Lux w/IR LEDs On
Effective Pixels	1305 x 1049 (1.39 MegaPixel)
S/N Ratio	More Than 52dB (AGC Off)
Smart Motion Zoom	YES
3D DNR	YES
Defog	YES
Standard Lens	Varifocal 2.8-12mm IR Corrected
IR LEDs (Built-In)	35 840nm LEDs
Power Source	Dual Voltage 12VDC/24VAC Operation
Power Consumption (12VDC)	210ma / 800ma (IR OFF/ON)
Power Consumption (24VAC)	230ma / 760ma (IR OFF/ON)
Environmental	14°F~ 122°F (-10°C~50°C) at 30%~80% RH
Dimensions	5.44" x 4.23" (138.3mm x 107.5mm)
Weight	0.75lb (318g)



## NOTES

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## **VITEK LIMITED PRODUCT WARRANTY**

VITEK products carry a three (3) year limited warranty. VITEK warrants to the purchaser that products manufactured by VITEK are free of any rightful claim of infringement or the like, and when used in the manner intended, will be free of defects in materials and workmanship for a period of three (3) years, or as otherwise stated above, from the date of purchase by the end user. This warranty is nontransferable and extends only to the original buyer or end user customer of a Vitek Authorized Reseller.

The product must have been used only for its intended purpose, and not been subjected to damage by misuse, wilful or accidental damage, caused by excessive voltage or lightning.

The product must not have been tampered with in any way then the guarantee will be considered null and void.

This guarantee does not affect your statutory rights.

Contact your local VITEK Reseller should servicing become necessary.

Vitek makes no warranty or guarantee whatsoever with respect to products sold or purchased through unauthorized sales channels. Warranty support is available only if product is purchased through a Vitek Authorized Reseller.



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