



EN

# **User Manual**

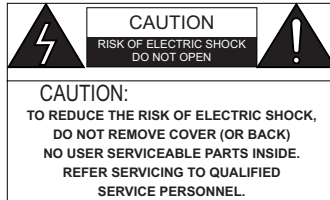
**1/3" HD-TVI, Day&Night, 12VDC,  
Infrared, IP-66**

**TVB-920F36IR**

**TVB-980V2812IR**

**TVD-920F36IR**

**TVD-980V2812IR**



The lightning with an arrowhead symbol, within an equilateral triangle is intended to alert the users to the presence of un-insulated “dangerous voltage” within the product’s enclosure that may be sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point with an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

This equipment has been tested and found to comply with limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications.

Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Changes or modifications not expressly approved by the manufacturer could void the user’s authority to operate the equipment.

To prevent electric shock and risk of fire hazards:

- Do NOT use power sources other than that specified.
- Do NOT expose this appliance to rain or moisture.

This installation should be made by a qualified service person and should conform to all local codes.

## General

### Features

- HD-TVI Technology
- 1/3" CMOS Sony
- Up to 500 meters
- 3D DNR
- BNC Video Output
- Standard 12VDC Operation
- IR LED for Night Vision
- True Day/Night ICR

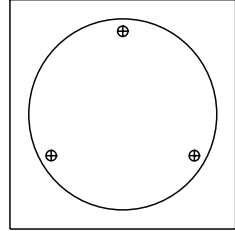
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### Specifications

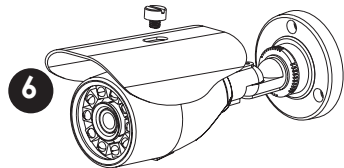
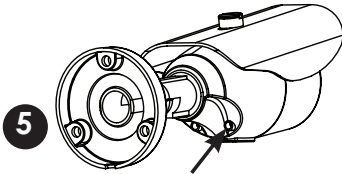
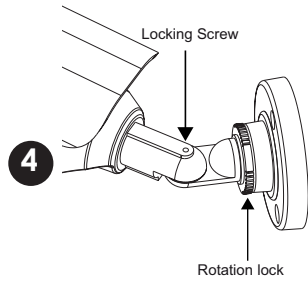
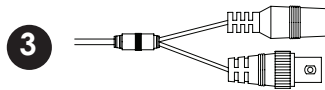
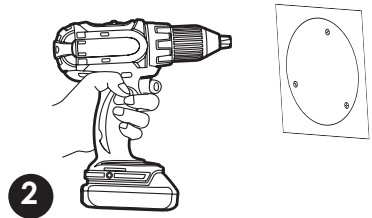
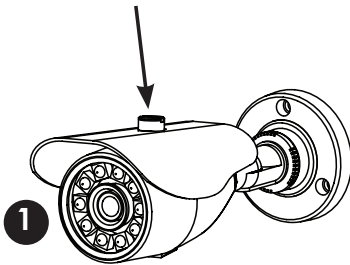
General		
Model	720p	1080p
IR LED	24/ 36pcs IR LED ( Model Dependant)	
Resolution	1280x960 @ 25fps	1920x1080 @ 25fps
Min. Illumination	0.01lux@F1.2(AGC ON), 0 Lux IR LED On	
Lens mount	Fixed mount	
Lens	Varifocal 2.8-12 mm or Fixed Lens models 3.6mm	
ACG / BLC	Auto	
WB	AWB	
Sync System	Internal	
E-Shutter	1/50s~1/50,000s	
Video output	up to 500m via 75-3 coaxial cable	
S/N Ratio	More than 48dB (AGC OFF)	
Video output	BNC Connector	
Protection rating	IP66	
Power consumption	DC12V, max. 4W	
Operating temperature	-10°C ~ +55°C	
Operating humidity	0-90% (non-condensing)	

# TVB-920F36IR / TVB-980V2812IR

## Parts supplied



## Installation

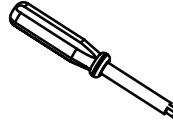
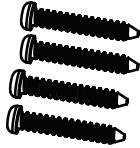
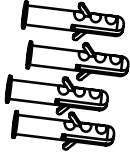


1. Remove sun shield from camera to aid simpler installation (optional requirement).
2. Use drill template (D) as to guide to drill and attach camera to surface as required. Holes on bracket are 120 degree apart, so three holes are required.
3. With camera attached you can now connect power, check device working.
4. Using the (C) L-Hex tool you position left-right up/down and lock into place. The rear position rotation allows turning of angle turn anti-clockwise to loosen.
5. Adjust zoom & focus using small flat blade. (Vari-focal model only)
6. Replace the sun visor if removed from step 1. Check IR LEDs are working by covering the photocell of camera, the IR LEDs will give a faint red glow.

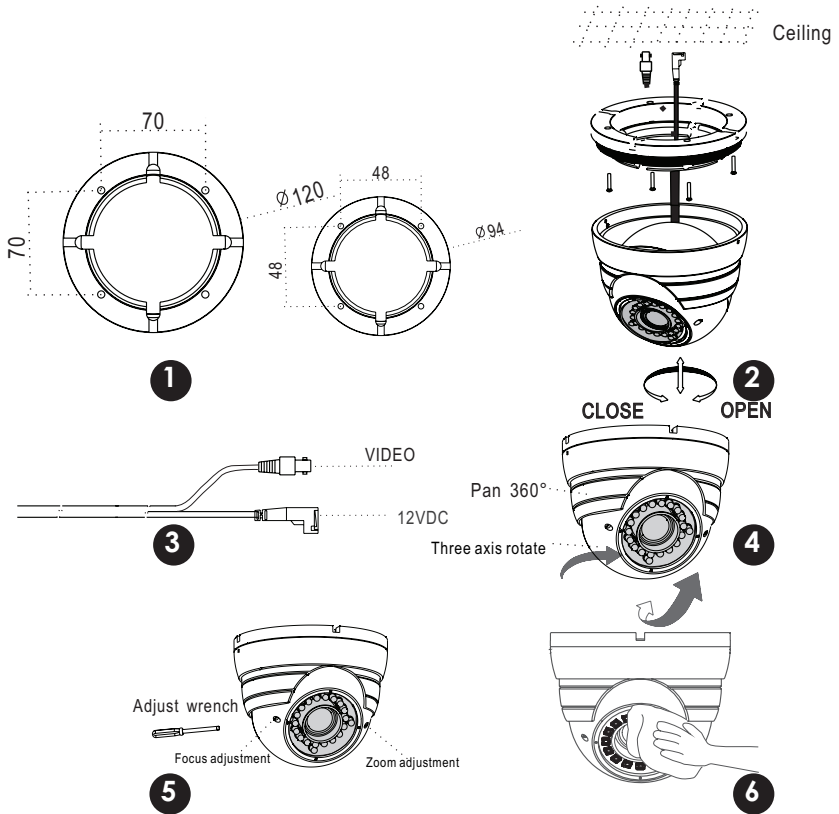
**i** Don't look at IR LEDs for long periods of time, as you could damage your eyes!

# TVD-920F36IR / TVD-980V2812IR

## Parts supplied



## Installation



1. Use the base as drill template. (Left is vari-focal model right fixed lens model)

2. Once base is firmly drilled into place, re-assemble parts.
3. Attach power and video. Make sure power + and - are correct
4. Position camera to suite make tight using the ring
5. Adjust the zoom & focus using the tool provided (Vari-Focal models)
6. Wipe clean the front glass to stop potential IR Led smear at night.
7. Check IR LEDs working by just covering the photocell of camera with your thumb, the IR LEDs will give a faint red glow.

**EN**

**i** Don't look at IR LEDs for long periods of time, as you could damage your eyes!

## OSD Control



SET: Push [ SET ] to enter Main Menu

UP/DOWN: [ UP ] or [ DOWN ] for move up and down.

LEFT/RIGHT: [ LEFT ] or [ RIGHT ] for modifying the menu parameters.

Please press down the set key for about 3 seconds and then release, can switch cycle simulation 720p and HD-TVI image signal output.

1. Press Set key to show the OSD Main Menu,
2. Select different menu content by UP and DOWN button
3. Through the left (LEFT) or right (RIGHT) button to change the selection of different modes.
4. Chose EXIT and press SET key to end the setting.

## OSD for 2.0MP cameras

### AE

- BRIGHTNESS: users can adjust it from 256-1024.
- AE MODEL: user can choose exposure, NORMAL, BACK LIGHT, FRONT LIGHT.

Backlight Compensation: when there is strongback lighting at the back of the monitored object,you can use this function to get clear images both for the object and the background Strong linght BLC by processing light signal or exposure compensation to achieve backlight compensation and brightness compensation.

### WB

- AUTO: The camera can adjust the white balance automatically according to the color temperature range.



## DAY / NIGHT

- **INTERNAL:** Select this, the camera will show color image in high lux and will auto change into black/white image in low lux. Color: select this menu to show color image. Black/White select this menu to show black/white image.
- **MONO:** select this menu to show black/white image.
- **EXTERN:** Switches between Color picture and Black & White picture as an EXTERN Switching Signal is received.

## VIDEO SETTINGS

- **VIDEO STANDARD:** Select image formats PAL or NTSC.
- **NR:** Reduce the image noise. 2D-NR: OPEN/CLOSE; Y-NR: OPEN/CLOSE; C-NR: OPEN/CLOSE
- **D-WDR:** choose the setting for WDR in accordance with the lighting condition set high in strong lighting contrast to realize higher quality image.

## LANGUAGE

- **LANGUAGE** English, Chinese

## RESET

- **RESET:** Restore the factory settings.

## SAVE EXIT

- **SAVE EXIT:** Save the settings after exit.

## EXIT

- **EXIT:** Don't save settings parameters after exit.

## OSD for 1.3MP cameras

### IMAGE

- **3D-DNR,** Reduce the image noise.

- WDR: choose the setting for WDR in accordance with the lighting condition set high in strong lighting contrast to realize higher quality image.
- IRIS MANUAL: Please choose 'MANUAL' when use manual iris lens for the camera;
- AUTO: Please choose 'AUTO' when use Auto iris lens for the camera.
- EXPOSURE CONTROL
- AE MODE: choose appropriate exposure mode, CENTER
- WEIG/BACK LIGHT/FRONG LIGHT/DISTINGUISH/GLOBAL CENTER.
- BRIGHTNESS: The default is 80.
- SHUTTER CONTROL: Can choose manual and auto.
- GAIN CONTROL: this function not only increase the brightness of camera images, but also increase the image noise, users can adjust it or shut it down according to actual situation.
- WB: The camera can adjust the white balance automatically according to the color temperature range. Can choose AWB-PRO/AWB-TEMP/AWB-AI/MANUAL/AWB-GW.
- IMAGE ENHANCE: The image sharpness, contrast, saturation adjustment.
- ZOOM IN: Choose drawings magnification 0 to 5.

### ADVANCED

- ZONE MASKING: COLOR: Selects the color of the screen area. SELECT: Choose need privacy masking area;
- MOTION DETECTION: 10. Function & Parameter
- SENSITIVITY: Adjust the parameters.
- SELECT: Select need detection area.
- MIRROR: About image reversal function.
- FLIP: The image upside down.

### DAY / NIGHT

- Auto: Select this, the camera will show color image in high lux and will auto change into black/white image in low lux.
- Color: select this menu to show color image. Black/White select this menu to show black/white image.
- Black/White: select this menu to show black/white image.
- EXT: Switches between Color picture and Black & White picture as an External Day/ Night Switching Signal is received.

### VIDEO STANDARD

- VIDEO STANDARD: PAL / NTSC

## **LANGUAGE**

- LANGUAGE: English, Chinese, Italian, French, Russian

## **LOAD DEFAULT**

- LOAD DEFAULT: Restore the factory settings.

## **SOFT VERSION**

- SOFT VERSION:

## **SAVE / EXIT**

- SAVE / EXIT: After saving preferences to exit.

## **EXIT**

- EXIT: Don't save parameters exit.



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Videor E. Hartig GmbH  
Carl-Zeiss-Straße 8  
63322 Rödermark/Germany  
Tel. +49 (0) 6074 / 888-0  
Fax +49 (0) 6074 / 888-100  
[www.videor.com](http://www.videor.com)  
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Version 08/2015