## CCTV42 1080P TVI HD Camera

# USER'S MANUAL

## **SAFETY PRECAUTION**



## Warning

Don't dismantle without authority, becareful thunder striking.



Note: To avoid thunder-strking, please don't open the backcover, the maintenance must be made by our authorized serviceman.



THIS SYMBOL MEANS THERE MIGHT BE DANGEROUS VOLTAGE INSIDE THE CASE, BE CAREFUL OF ELECTRIC SHOCK.



MAN

THIS SYMBOL REMINDS YOU TO PAY ATTENTION TO IMPORTANT OPERATION AND MAINTENANCE INSTRUCTIONS IN THE ACCOMPANIED INFORMATION

## **WARNING**

- ➤ In order to prevent damage caused by fire or electric shock, please do not put cameras in a moist environment or rainwater.
- Please make sure the adapter is consistent with product specifications, otherwise it might cause fire, electric shock or damage.
- > Pay attention to the polarity of the adapter, it might cause some accidents, like fire.
- Please don't connect multiple cameras with the same adapter at the same time, overloading the adapters capacity may cause fires.
- Power supply must be firmly plugged in, so as not to cause fires.
- ➤ If the device gives off an 'abnormal smell or smoke', please stop immediately and contact CCTV42.
- Please do not splash water onto the products components when cleaning.

## **NOTES**

- ➤ Do not drop the products from height and stay away from strong electromagnetic interference and vibration.
- ➤ There are some sophisticated parts inside the camera, therefore, during transportation and installation, please avoid stress or severe vibration. For the sake of safety, please do not switch on power before accomplishing all installation.
- ➤ Please comply with all electrical safety standards during operation; the camera or signal transmission cable should maintain a sufficient distance (50 metres) from high-voltage equipment or cables, if necessary, thunder and lightening protective measures must be taken.
- Please install the camera in well-ventilated environment.
- Please do not position the camera face in direct sunshine or other strong light to avoid any possible damage to the lens and the sensor.
- ➤ The temperature range of -10 to 50 degrees and humidity range of 90% for cameras, please do not start cameras beyond these ranges.
- ➤ To avoid shocks, please make sure the installation of the power supply ground line is in good condition.
- To prevent the equipment from damage by shower or splashing of liquid, please do not place the device near liquids.

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## 1 FEATURES

These products use SONY progressive CMOS image sensors, with EYENIX EN773E DSP, 1080P HD natural and smooth image quality.

- > Standard analog connector, no compression, no delay
- > ICR filter to get Day and Night vision
- OSD menu
- Camera is widely used in places like Financial, Telecom, Supermarket, Hotel, Government, School, Airport, Factory, Police, Judicature place which demand HD image quality.

#### 1. New generation TVI 1080P program

SONY progressive Exmor CMOS image sensor, with EYENIX EN773E DSP, 1080P HD with standard TVI connector.

#### 2. High-Definition resolution

Maximum colour resolution output: 1920(H) x 1080(V)

#### 3. Day/Night

A D/N camera works just like colour cameras during the day and switch to a black and white mode at night, using a removable IR cut filter.

#### 4. Wide Dynamic Range

WDR could resolve an image problem when there's dramatic light difference between outdoor and indoor areas, so that all the details both in the light and dark zones could be seen clearly.

#### 5. 3D Digital Noise Reduction technology

DNR technology enhances the ability to handle the signal to noise ratio, it allows the camera to receive more clear and vivid images even under low-light conditions.

#### 6. Back Light Compensation

The BLC function can adjust the surroundings with too weak and strong brightness, to get a clear optimized picture.

#### 7. Motion Detection

The MD function can trigger an alarm or recording when sensing moving objects, users can set the sensitivity and multiple detection zones.

#### 8. Privacy

The Privacy Mask can block out sensitive areas from view, covering the areas with a solid block of colour, you can adjust the mask position and size.

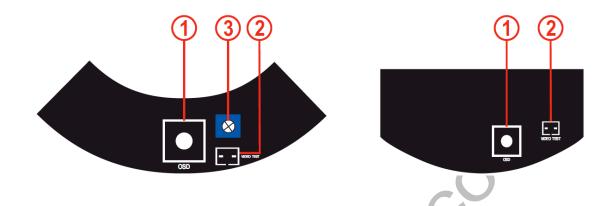
#### 9. Smart IR

When getting a picture of nearby objects, the reflected IR light is too strong and can cause over exposure. However, Smart IR Control can sense the IR light and intelligently control it in order to eliminate the exposure and get a perfect image.

#### 10 090

On Screen Display Menu

## 2 INTERFACE FUNCTIONS

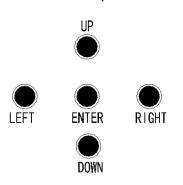


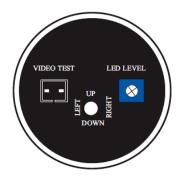
1	ENTER	Use this button to display the main menu, to confirm and to enter the submenus when they are available.
	UP/DOWN	Use this button to move the cursor upwards/downwards to the desired item
	LEFT/RIGHT	Use this button to move the cursor to the left/right to select or to adjust the parameters of the selected item.
2	VIDEO TEST/VIDEO OUT	Additional video out for installation
3	LED LEVEL	For the customer to customize the IR brightness

## 3 OSD

#### (On Screen Display)

Press the 'ENTER' button either on the body of the camera or the connector cable (as shown in the picture below).







#### a. LENS MODE

Two Different modes of lens, DC and Manual, users can choose the mode according to the lens type.

Manual Lens: When using a fixed iris or manual iris lens, please choose Manual mode.

DC Lens: When using an auto iris lens, please choose DC mode.

Indoor/Outdoor DEBLUR there is a further 3 optional modes.



#### b. EXPOSURE

#### > Brightness

Select to set the camera brightness

#### > Shutter Speed

Select to set the camera shutter speed. The shutter speed can be fast or slow, the value is AUTO, 1/25 – 1/60000, FLICKER

#### > SENS-UP

SENS-UP can enhance the brightness of night vision, 'OFF/x2/x8' adjustable, the value of SENS-

UP should not be to big otherwise the image will have streaks at night.

#### > AGC Control

AGC: 1-20 adjustable, this function can enhance the camera image brightness, but will also enhance the camera iamge noise, users can adjust the value according to the situation

#### > RETURN

Return to previous menu.



#### c. BACK LIGHT COMPENSATION

- ➤ Press 'Left'/'Right' at 'Back Light' mode menu to select from BLC or HLC
- ➤ In BLC the user can adjust the position and size of the BLC area.
- ➤ In HLC there are level adjustments between 0-20, ALL DAY/NIGHT ONLY mode optional





#### d. WHITE BALANCE

> Used to restore the authenticity of colour when it's affected by the change of colour temperature, users can select different WB modes according to actual

Word did not find any entries for your table of contents. Remark: Normally the user only needs to use ATW.

➤ Manual Mode:

R-GAIN/B-GAIN users can adjust the Red and Blue colour of the image.



DAYANIGHT

#### e. DAY/NIGHT

> Mode

There are 4 modes of day/night: colour, black and white, Ext and Auto mode.

> ANTI-SAT

This is to solve the over-exposure problem when IR is on: 0-20 adjustable.

> External

High/Low Optional.

> AGC Threshold

Set the threshold for colour changing to B/W (0-20 adjustable), the greater the threshold value the later it converts.

> AGC Margin

Set the tolerance value for colour changing to B/W (0-20 adjustable)

> Delay

Set the Delay time for colour changing to B/W, Low/Middle/High optional

#### f. DNR

➤ 3D Digital Noise Reduction optional settings of High/Middle/Low/Off.



#### g. IMAGE

> Sharpness

Adjustable 0-10

> GAMMA

0.45, 0.50, 0.55, 0.60, 0.65 optional

Colour Gain

Adjustable 0-20

➤ Mirror

On/Off

➤ Flip

On/Off

➤ Digital Zoom

1x – 8x digital zoom adjustable.

> DWDR

Off/Low/Middle/High optional

Defog

On/Off: When the defog function is on, users can adjust the mode and level in the sub menu.

> Shading

On/Off: When the shading function is on, users can adjust the mode and level in the sub menu.

> Privacy

On/Off: When privacy function is on, users can adjust the position/size/sensitivity in the sub menu.

◆ Area number: 16 areas optional

- ♦ Area DisplayL On/Off
- Position Size: Users can adjust the position and size of the area
- ♦ Area brightness: 0-20 adjustable
- ♦ Area Colour: 0-20 adjustable





#### h. MOTION

- > Sensitivity: 0-20 adjustable
- > Transparency: 0-6 adjustable
- Position size: Users can adjust the position and size.
- > Alarm OSD: On/Off



#### i. SYSTEM

- > Communication: N/A
- ➤ Video Range: Full/User/Comp optional
- ➤ Video Size: 1080p/720p/720p corp optional
- ➤ Video Rate: 25FPS/30FPS Optional
- > Video System: PAL/NTSC Optional.
- ➤ Language: English, Chinese, Korean, Japanese, German, French, Spanish and Italian Optional
- > **Reset**: Return camera to default settings
- > Return: Return to previous menu

## # AND ##508 FULL ##600 TOBBP #000100 3 #0000 25 FP3 ##600 PAL ##6 CMS131 ##60 X ##6 #\$ ##6

#### j. EXIT

Exit OSD

## 4 SPECIFICATIONS

Image sensor	1/2.8 inch Sony CMOS Sensor IMX322
Effective pixel	1920(H) * 1080(V)
Resolution	1080P
Minimum Illumination	0.05LUX (F1.2 AGC ON) / 0LUX IR ON
S/N Ratio	More than 60 DB (AGC Off)
Video Out	Follow the TVI 1080P output level
FPS	25Fps/30Fps
OSD Adjustable	YES
White Balance	AWB/Auto track white balance/AWC-SET/indoor/outdoor/manual adjustable
BLC	BLC/HLC/OFF adjustable
Shutter	1/25s 1/60000s support slow shutter 2X8X
WDR	On/Off adjustable
Day/Night Switch	Day/B&W/COLOR/external control adjustable
Function	Flip/Mirror
Privacy	16 areas
OSD Language	English /Chinese/ Korean/ Japanese/ Germany/ French /Spanish/ Italian
Transmission Distance	500M by 75-5 200M by twisted pair
Working Temperature	-20°C 50°C humidity less than 95%
Power	DC12V +-10%
Consumption	1.2W(100MA)
Dimension	38mm * 38mm

## 5 FAQ

- 1. No image after installation?
  - a. Check to connect the power supply correctly, whether the indicating led is always on or not;
  - b. Check the video cable, make sure it is workable;
  - c. Check if the monitor has been open.
- 2. Image interference after installation
  - a. Check the power quality, if the adapter can't work, please replace another one;
  - b. Check if electromagnetic interference exists in the surroundings, please use some anti-interference devices.
- 3. RS485 can't control menu?
  - a. Please check the controller issued code is correct:
  - b. Please check if the control circuit is smooth;
  - c. Please verify the communication address, baud rate well-matched;
  - d. Please check if the connection interface is loose.
- 4. Camera image can't switch into B/W at night?
  - a. Please open the camera menu to see if "Day/Night Switch" is set as AUTO, if not, please change into AUTO.
- 5. Noise is very obvious at night with low illumination.
  - a. Please make sure AGC ON.
- 6. The image color is abnormal.
  - a. Please make sure if the white balance is correctly set as Auto White Balance;
  - b. Please enter the menu to restore factory settings.
- 7. Image appears to be whiter than usual after installation?
  - a. Please check whether the lens aperture was adjusted too large, so that the image appears whiter;
  - b. Please verify the camera rear panel, if the regulator potentiometer is adjusted too large;
  - c. Check if the brightness of the monitor is too large.