

Safety Instruction

Thank you for purchasing this HD CCTV Camera. Please read these instructions carefully for a thorough understanding of how the cameras operates.

1. Operating requirements

- 1.1 Before using the camera ,please read this manual carefully and keep it safely for later use.
- 1.2 Installation should be proceed by professional service and follow manufacturer's instructions, do not dismantle without authorization.
- 1.3 In order to prevent sensor ,do not expose lens to intense light source in long time.
- 1.4 Do not touch sensor directly. Please covers the dustproof cover when the camera is not being used.
- 1.5 Please use a dry soft cloth to clean the camera. If dirt difficult to clean, use detergent with water and wipe dry the camera.
- 1.6 Do not install camera under air conditioning's air gate ,or else lens blur with condensation of moisture.
- 1.7 Please ensure that all electric power sources are turned off when not open , installation ,clean, etc operation.
- 1.8 Please transporting , using and storing the camera in allowable temperature and humidity.
- 1.9 If the camera was broken, for example power cord or plug damaged ,splash liquid or foreign matter fall into camera, raining ,wetting ,etc can't work situation ,please contact manufacturer or maintenance center (modify and maintenance without permission ,you must be responsible for the problems)

2. Statement

- 2.1 All photos here are for reference only .Specifications are subject to physical product.
- 2.2 This manual is subject to change without further notice.
- 2.3 Please contact with customer service for the newest procedures and supplementary specification.
- 2.4 This manual list several model numbers for reference , please user according actual product to operating.
- 2.5 We will do the best to keep this manual complete and accurate, but some data may has deviation. If any doubt or dispute ,company retain the final right of the product.

1

Feature

- ACCE (Adaptive Color & Contrast Enhancement)
- NTSC/PAL Selectable
- DC Lens

Specification

Imaging Sensor	1/3" 2.1Megapixel CMOS
Scanning System	Progressive Scan
S/N Ratio	More than 50dB (AGC Off)
Video Output Mode	1080P(1920 X 1080)
Video Output Level	HD-SDI /1.0 Vp-p (75Ω, Composite)
Lens	2.8-12mm Manual Zoom Lens
Min. Illumination	1.0Lux(Color) , 0. 5Lux (BW)
IR Distance	60M (with Ø 5X72PCS LED)
OSD	Built-in
Electronic Shutter	Auto/FLK/1/25,30sec ~ 1/50000sec
AGC	Low/Middle/High
2D/3D-NR	2DNR/3DNR/SMART NR
Digital Zoom/PIP	On/Off(x2 ~ x64)
D-DFEECT	Freeze/Mirror/D-Zoom/NEG. IMAGE
Voltage/Current	DC12V±10% / 210mA (850mA with IR on)
Operating temperature	-10° ~ +50° C
Dimension (mm)	315(W) X 125(H) X 120(D)
Weight (g)	2000

3

HD CCTV CAMERA

USER MANUAL



INTRODUCTION:

This camera which has 2.1M Pixes is specially designed for security monitoring. It applies the latest 2.1M Pixes progressive scan CMOS. It is a heavyweight new-designed HD camera which applied DC12V and support user customize the output parameter settings.

Packing List

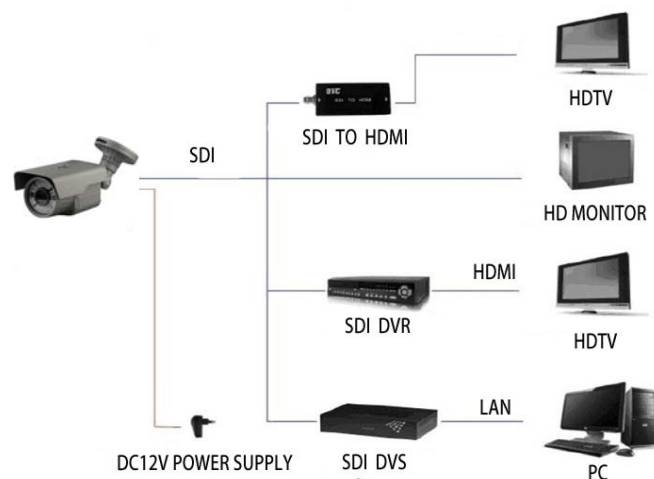
NO.	Name	Model	Number
1	Camera	LIED90SNHD	1
2	Power line	—	1
3	Warranty Card	—	1

2

Wire ports



Application method



4

Function Menu

OSD MENU

LENS	■DC	■VIDEO	■MANUAL
EXPOSURE	■SHUTTER ■ACCE	■AGC ■DEFOG	■SENS-UP ■BACKLIGHT
WHITE BAL	■ATW ■INDOOR	■AWC→SET ■OUTDOOR	■MANUAL
DAY&NIGHT	■COLOR	■AUTO	■EXT ■B/W
NR	■2DNR	■3DNR	■SMART NR
SPECIAL	■CAM TITLE ■LANGUAGE	■D-EFFECT ■DEFECT	■MOTION ■RS485 ■PRIVACY
ADJUST	■SHARPNESS ■NTSC/PAL	■MONITOR	■OSD ■LSC
RESET	■FACTORY		
EXIT			

How to use the camera

LENS

1. When the SETUP menu screen is displayed, select LENS by using the UP and Down buttons so that the arrow indicates LENS

- ▶ DC/VIDEO/MANUAL: Select Auto Iris Lens.

EXPOSURE

1. Using this function, you can control screen brightness.

- ▶ SHUTTER: MANUAL/AUTO.
 - * MANUAL
NTSC: 1/30 ~ 1/50000, X2 ~ X30.
PAL: 1/25 ~ 1/50000, X2 ~ X30.
 - * FLK: Select this when you picture flicker.
 - * AUTO: Select this mode to control the shutter speed automatically. Shutter speed is automatically controlled

5

- ▶ MANUAL: Select this to fine-tune White Balance manually.

DAY & NIGHT

- ◆ You can display pictures in Color or Black and White.
 - ▶ AUTO: Switched Color and B/W automatically.
 - EXT: You can select the external equipment about changing the day/night mode.
 - ▶ COLOR: The picture is always displayed in color.
 - ▶ B/W: The picture is always displayed in B/W.

NR

◆ This function reduces the background noise in a low luminance environment.

- * 2DNR(noise reduction) * 3DNR
- * SMART NR (3DNR+ motion detection)

SPECIAL

- ◆ Select a desired mode using the UP and DOWN buttons.
 - ▶ CAM TITLE: If you enter a title, the title will be appear on the monitor.
 - ▶ D-EFFECT
 - * FREEZE: You can stop the image or reactive it.
 - * MIRROR
 - MIRROR: you can flip the image horizontally.
 - V-FLIP: you can flip the image vertically.
 - ROTATE: you can rotate the image on the screen.
 - * D-ZOOM
 - PIP: PIP display ON/OFF - D-ZOOM: X2.0~X64
 - PAN&TILT: Set to change PIP position.
 - * NEG.IMAGE: ON/OFF
 - ▶ MOTION
 - * SELECT: Select AREA1~AREA3.
 - * DISPLAY: Select AREA ON/OFF.

7

depending on the brightness of the screen.

▶ AGC: You can adjust it LOW, MIDDLE and HIGH level. The higher the gain level, the brighter the screen but the higher the noise.

▶ SENSE-UP: When it is night, the camera automatically detects the light level and maintains a clear picture.

▶ BRIGHTNESS: You can control the brightness .

▶ ACCE: If there are bright area and dark area on the screen at the same time, this function makes both areas to be in clear image

- OFF, LOW, MIDDLE, HIGH 4step.

▶ DEFOG: Carry out defog function.

- OFF, LOW, MIDDLE, HIGH 4step.

▶ BACKLIGHT: This function allows you to get a clear pictures of objects even the objects in strong backlight.

* BLC : GAIN: LOW, MIDDLE, HIGH

AREA: Area set (size & position).

* HSBLC: To inhibit strong light and compensate brightness of the area around it.

* SELECT: AREA 1~AREA 4 * DISPLAY: select area ON/OFF

* LEVEL: Masking level set * MODE: ALL DAY and NIGHT

* BLACK MASK: Mask ON/OFF

WHITE BAL.

▶ ATW: Select this when the color temperature is between 2400° K and 11,000° K.

▶ AWC→SET: To find the optimal setting for the current luminance environment in this mode, set the point the camera towards a sheet of white paper and press the SET button. If the environment changes, readjust it.

▶ OUTDOOR: Select this when color temperature is around 5,100° K.

▶ INDOOR: Select this when the color temperature is around 3,100° K.

6

* SENSITIVITY: When the number is high, the detection is increased to recognize even small movement.

* MOTION VIEW: ON/OFF.

▶ PRIVACY: Hide an area you want to hide on the screen.

* SELECT: AREA1~8 * DISPLAY: Select AREA ON/OFF

* COLOR: 1~16 color step * DEFAULT: Factory Reset

▶ LANGUAGE: ENGLISH/CHN1/CHN2/JPN.

▶ DEFECT: CMOS correction to compensate for defects that can be occur at the low light conditions.

* LIVE DPC: Auto defect. * LEVEL: Level of Auto defect.

* STATIC DPC: Manual defect. * LEVEL: Manual defect value.

* START: Start defect.(Close the lens to shield the light, Select the START).

* SENS-UP: Sense up value.

▶ RS485: This function sets up the camera communication status when controlling the camera through an external device.

▶ VERSION: Version of camera.

ADJUST

▶ SHARPNESS: Adjust the sharpness of the image.

▶ MONITOR: CRT monitor and LCD monitor.

* LCD: Set GAMMA, BLUE GAIN, RED GAIN.

▶ OSD: TEXT COLOR & OUT LINE A adjustable.

▶ LSC: Lens shading compensation.

▶ NTSC/PAL: Select NTSC/PAL.

RESET

▶ FACTORY: Resets the camera setting to the factory defaults. Language and LENS status is not initialized.

EXIT

Press the ENTER button in the EXIT menu to save the current settings and exit the MAIN SETUP menu.

8