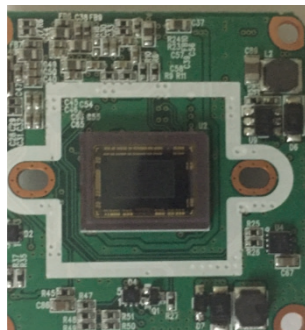


in30S7N1L30 4-in-1 Quick Start Guide



Rev 0.1



Before operating this product, please read this quick-start guide to ensure proper use. Please store these instructions a safe place for future reference.

FEATURES

- 1080P Full HD High Sensitivity Sensor
- 800 TVL Resolution Analog
- 1080P TVI, AHD, CVI, Analog Selectable
- WDR, HLC, BLC, DEFOG
- Sens Up
- On Screen Menu
- 12VDC

PRECAUTIONS

1. Before installing and operating the unit, please read this manual carefully.
2. Precision components are contained in this camera, please avoid violent vibrations during installation and maintenance. Do not connect the power until you have completed the installation.
3. Please obey all local electrical wiring regulations when using this unit.
4. Do not use abrasive or corrosive materials for cleaning. Use only a soft cloth for cleaning.
5. To prevent damage to the lens or sensor, do not point the camera directly into the sun or very strong light sources.
6. Do not use the camera outside its working temperature (-10°C ~ 50°C / 14°F ~ 122°F) or humidity (<90%) ranges.
7. Ensure that the power supply meets the current requirements of the camera and that the supply voltage is inside the tolerances of the camera: 12VDC ±10%

OSD MAIN MENU

When the OSD menu is launched, you are presented with the adjacent opening screen. A menu option followed by a ↵ indicates the presence of a sub-menu. Options set to OFF will not show a ↵ until set to ON

Use RETURN ↵ to return to the previous menu.

MENU	
EXPOSURE	↵
BACKLIGHT	WDR ↵
DAY/NIGHT	↵
WHITE BALANCE	↵
DNR	Middle
IMAGE	↵
MOTION	OFF ↵
SYSTEM	↵
EXIT	SAVE ↵

EXPOSURE MENU

EXPOSURE :

- **Lens**- Manual
- **BRIGHTNESS** - Sets the level of the overall brightness
- **SHUTTER**- OFF, 1/60~1/120K. (1/50~120K PAL) Set this on to reduce the exposure time of each image. This can be used to reduce blur in images with fast changing content.
- **FLK**- Use this when flicker is observed in the image under fluorescent lighting. When FLK is ON, the shutter menu is disabled.
- **SENS UP** - Slows frame rate and increases low light sensitivity
- **AGC- Off or Level Control** -Used to adjust overall AGC level

IMAGE	
LENS	MANUAL
BRIGHTNESS	10
SHUTTER	AUTO
SENS-UP	x4
AGC	10
RETURN	↵

BACKLIGHT

BACKLIGHT - OFF, BLC, HLC, WDR

- **BLC** - Adjust the area to be enhanced and sets the level. Initial resets the BLC setting to defaults.
- **HLC** - (High Light Compensation) Low, Middle, High. This inverts over exposed areas from white to black
- **WDR**- Weight, Low, Middle, High. Provide optimal image exposure in images with extremes of lighting, this is used to improve contrast in bright/dark areas.

BACKLIGHT	
WEIGHT	MEDIUM
RETURN	↵

DAY/NIGHT MENU

DAY/NIGHT - AUTO, COLOR, B&W, EXT

- **AUTO** - Allows the camera to switch from color to monochrome mode in low light. The switching thresholds and hysteresis time are adjustable.
- **COLOR**- Fixes the camera in color mode.
- **B&W** - Fixes the camera in monochrome mode.
- **Extern - NA**

◆ DAY/NIGHT ◆	
MODE	AUTO
D>N	10
N>D	7
THRES DELAY	2
RETURN	↵

WHITE BALANCE MENU

WHITE BAL - AWB (default), AUTOext PRESET, MANUAL

- **AWB** - the camera automatically samples the image for optimum white balance
- **PRESET** - Allows the white balance to be set automatically and locked. This option is normally used when no white reference is present in the image. To set the white balance, hold a white object in front of the camera, with light from the source falling on it and press the joystick to set and lock the white balance
- **MANUAL** - This option allows the color temperature, red and blue gain to be manually set in the image. Note, using this option requires care to ensure all cameras on one system have the same color response.

MANUAL	
C-TEMP	5000K
R-GAIN	[10]
B_GAIN	[10]
RETURN	↵

DNR

DNR - OFF, LOW, MIDDLE, HIGH - Controls the level of digital noise reduction applied to the image. Increasing DNR may soften the image.

IMAGE

DISPLAY ADJ - OFF, ON - Press to open submenu.

- **COLOR GAIN** - Level control
- **SHARPNESS** - Level control
- **GAMMA** - 0.35~0.70, default 0.45 - sets the gamma response of the camera. This used to compensate for the output response of different display types. It can also be used to bring out details in low light areas of an image.
- **MIRROR**- OFF/ON, Set this feature to ON to show a mirror image of the camera view.
- **FLIP**- Flip image ON or OFF
- **D-Zoom**- Digitally zooms in on center of image
- **ACE** -Adaptive Contrast Enhancer- ON/OFF
- **DEFOG** - Improves the clarity of image obscured by fog and snow by analysing the brightness of the image and compensates the color of the image.
- **SHADING** - Level control for lens
- **PRIVACY ZONE** - OFF, ON - 2 kinds, BOX (16) Polygon (4)

DISPLAY ADJ	
COLOR GAIN	[10]
CHROMA	[5]
GAMMA	.5
MIRROR	OFF
FLIP	OFF
D-ZOOM	0.0x
ACE	OFF
DEFOG	OFF
SHADING	OFF
PRIVACY	OFF
RETURN	↵

MOTION

- **MOTION** - OFF, ON - Press to open submenu.
- **DET WINDOW**- Select Zone 1-4 to set up
- **SENSITIVITY** - Set sensitivity threshold, A high figure makes the zone more sensitive.
- **MOTION OSD**- If selected Motion area Box will be displayed on screen
- **TEXT ALARM** -If Selected Text will show on screen when motion is activated.

MOTION SET	
DET WINDOW	OFF
SENSITIVITY	5
MOTION OSD	OFF
TEXT ALARM	OFF
RETURN	↵

SYSTEM

- **SYSTEM** -Gives access to basic camera configuration
 - **COM** - Protocol, Camera ID , Baudrate
- **OUTPUT** - 4-in1 Selections
 - **FRAMERATE** - 1080P 60/50 or 30/25, 1080i 60/50 ,720P 60/50 or 30/25
 - **FREQ- 60/50Hz**
 - **CVBS OUT** - (4:3, 16:9)
 - **ANALOG MODE:** HD-T (TVI), HD-C (CVI), HD-A (AHD), CVBS
 - **CONFIRM**-If you change any selection in the output mode press and hold the enter button for 3 secs. If watching the screen it will change from ON to show "PUSHING" This will confirm the selection you just made above.
- **LANGUAGE** Default to English -CHN, CHNs, JPN, KOR
- **CAM TITLE**
- **RESET**

SYSTEM	
COM	↵
OUTPUT	↵
COLOR BAR	OFF
LANGUAGE	ENG
CAM TITLE	OFF
RETURN	↵

EXIT

- **EXIT** -Exits the menu mode

SPECIFICATIONS

	System	NTSC
CMOS	Sensor	1/2.8 2MP Advanced Sensitivity Sensor
	Effective Pixels	1920 x 1080 NTSC
Performance	Resolution HD	1080P Full HD
	Resolution Analog	>800TVL
	Sensitivity	0.03Lux
	S/N Ratio	52dB
	Day / Night	Software Controlled
Lens	Type	3mm Fixed Lens
	Mount	12mm Bayonette
Functions	Video Interface	Anlog HD (TVI,CVI,AHD) CVBS
	OSD	English, Chinese, Japanese, Korean
	Shutter	1/60~120,000
	Flickerless	On/Off
	WDR	Off/Low/Medium/High
	DEFOG	AUTO/MANUAL/Low/Medium/High
	AGC	Adjustable Level
	SENS UP	Adjustable Level 128x
	Electronic shutter	Off/On 1/200,000 sec maximum
	Sync	Internal
	Camera ID Number	Off/On 1~255
	Camera Name	Off/On, 8 Characters
	White Balance	AWB/Manual/Preset
	DNR	2D+3D Off/Low/Middle/High
	Gamma	0.35,0 .4, 0.45, 0.5, 0.55
	Motion Detection	4 areas, Off/On, Position & Sensitivity
	Privacy masking	20 areas, Off/On, Color, Position
Image functions	Sharpness, Mirror, Flip, d-zoom	
Input/Output	Video Output	CVBS 1.0Vp-p 75Ω - BNC
Power	L Model	12VDC±10% 2.5W max
Physical	Dimensions (mm)	32 x 32
	Mounting	Surface
Environmental	Operating Temperature	-10°C~+50°C
	Humidity	Less than 90%, non condensing
Order Codes	3mm	inCM32S7N1L30

We reserve the right to amend specifications and design without prior notice