

DH-KIT/XVR1B04-I-SSD(512G)/2-B1A21N-U-0360B/2-T1A21N-U-0360B/Balun

1080P HDCVI Balun SSD KIT: 4CH S-XVR with 4×1080P HDCVI Cameras



Series Overview

HDCVI KIT is an all-in-one security package with all necessary products for one solution. Not only will it simplify the buying process, but also offer top-tier security and an integrated solution. Based on it, Dahua launched HDCVI SSD KIT with surveillance-grade SSD and brand new eco-friendly package, contributing to environmental protection and a low-carbon life.

Functions

Balun Transmitter

Balun KIT comes with the balun inside. It is used for data transmission between analog camera and DVR. Compared with the traditional coaxial cable transmission, the wiring cost of balun is more cost-effective.

Internal SSD

Unlike the traditional KIT, SSD KIT comes with the SSD preinstalled in the device. It is more energy efficient, and has stronger vibration resistance and better heat dissipation. SSD KIT also saves you time on selecting the type of hard disk and installing it, greatly increasing your efficiency.

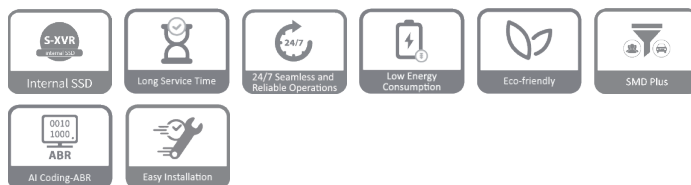
Long Service Time

Designed with a 30-year service life, the SSD uses high-quality 3D TLC NAND chips and optimized algorithms. What's more, SSD MTBF is up to 1,500,000 hours.

24/7 Seamless and Reliable Operations

Dahua released surveillance SSD designed for CCTV systems, featuring improved SSD read/write performance with Dahua algorithms. SSD underwent strict tests with the XVR and NVR to ensure system stability.

- Comes with an internal 512GB SSD, and can record videos for about 18 days.
- 2 MP CMOS, 30fps@1080p
- Max IR 20m, ICR, Smart IR
- 3.6mm fixed lens
- Quick-to-install
- IP67(Bullet), 12 VDC±30%
- Balun transmitter
- H.265+/H.265 dual-stream video compression.
- Supports Full channel AI-Coding.
- Supports HDCVI/AHD/TVI/CVBS/IP video inputs.
- Max 5 channels IP camera inputs, each channel up to 2MP; Max20 Mbps incoming bandwidth.
- Up to 4 channels video stream (analog channel) SMD Plus.



Low Energy Consumption

Compared with HDD, SSD can save energy by about 78.6%, reducing customer use costs and save resources for the planet. Under 24/7 operating environment, SSD can save at least 38kWh of power per year.

Eco-friendly

SSD features less noise and low weight. What's more, improved packaging that is smaller, lighter, and built of Dahua laminated material, which is biodegradable and 99% recyclable.

SMD Plus

With intelligent algorithm, Dahua Smart Motion Detection technology can categorize the targets that trigger motion detection and filter the motion detection alarm triggered by non-concerned targets to realize effective and accurate alarm.

AI Coding-ABR

Compared with H.265, AI coding-ABR can save 50% on storage costs, also save bit rate for complex scenes, which can prioritize image quality in dynamic scenes.

Easy Installation

HDCVI eyeball comes with a quick-to-install pedestal, which makes it easier to install than conventional eyeballs and reduces cost on time and labor.

Technical Specification

System

Main Processor	Industrial-grade processor
Operating System	Embedded Linux
Operating Interface	Web; Local GUI

SMD Plus

SMD Plus by Recorder	4 channels: Secondary filtering for human and vehicle, reducing false alarms caused by leaves, rain and lighting condition change
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Audio and Video

Analog Camera Input	4 BNC ports, supports HDCVI/AHD/TVI/CVBS auto-detect
Camera Input	1. CVI: 1080p@25/30 fps; 720p@50/60 fps; 720p@25/30 fps. 2. TVI: 1080p@25/30 fps; 720p@25/30 fps. 3. AHD: 1080p@25/30 fps; 720p@25/30 fps.
IP Camera Input	Up to 5 channels of IPC access 1 IP channel by default + 4 channels (analog channels are converted to IP channels) Incoming bandwidth: 20 Mbps, recording bandwidth: 20 Mbps and outgoing bandwidth: 20 Mbps *After IP extension is enabled, the AI Function (SMD) will be disabled.
Encoding Capacity	Main stream: 1080N/720p/960H/D1/CIF@(1 fps~25/30 fps) Sub stream: CIF@(1 fps~15 fps)
Dual-stream	Yes
Video Bit Rate	32 kbps~4096 kbps
Audio Sampling	8 kHz, 16 bit
Audio Bit Rate	64 kbps
Video Output	1 HDMI, 1 VGA HDMI: 1920 × 1080, 1280 × 1024, 1280 × 720 VGA: 1920 × 1080, 1280 × 1024, 1280 × 720
Multi-screen Display	When IP extension mode not enabled: 1/4 When IP extension mode enabled: 1/4/6
Third-party Camera Access	Panasonic; Sony; Hanwha; Axis; Arecont; ONVIF

Compression Standard

Video Compression	AI Coding; Smart H.265+; H.265; Smart H.264+; H.264
Audio Compression	G.711a; G.711u; PCM

Network

Network Protocol	HTTP; HTTPS; TCP/IP; IPv4; IPv6; RTSP; UDP; NTP; DHCP; DNS; SMTP; UPnP; IP Filter; FTP; DDNS; SNMP; Alarm Server; P2P; Auto Registration; IP Search (Supports IP camera, DVR, NVS, etc.)
Mobile Phone Access	iOS; Android
Interoperability	ONVIF 22.12 (Profile T; Profile S; Profile G); CGI; SDK
Browser	Chrome; IE; Safari; Edge; Firefox

Recording Playback

Record Mode	General; alarm; motion detection
Recording Playback	1/4
Backup Method	USB device and network

Playback Mode	Instant playback; general playback; event playback; tag playback; smart playback
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Alarm

General Alarm	Motion detection; HDCVI alarm; camera external alarm; network alarm; PIR alarm
Anomaly Alarm	Error (no disk, disk error, low space, low quota space; network disconnection; IP conflict; MAC conflict); video loss; video tampering; camera offline
Intelligent Alarm	SMD Plus
Alarm Linkage	Record; snapshot (panoramic); IPC external alarm output; audio; buzzer; log; preset; email

Ports

Audio Input	1-channel RCA 4-channel BNC (Coaxial Audio)
Audio Output	1-channel RCA
Two-way Talk	Yes (share the same audio input with the first channel)
HDD Interface	1 SSD: 512GB(replaceable with 256 GB or 1 TB) Stores for 18 days under default settings
USB	2 (2 rear USB 2.0 ports)
HDMI	1
VGA	1
Network Port	1 (10/100 Mbps Ethernet port, RJ-45)

General

Power Supply	12 VDC, 1.5 A
Power Consumption	<7 W (with SSD)
Net Weight	0.55 kg (1.19 lb)
Gross Weight	0.97 kg (2.11 lb)
Product Dimensions	197.0 mm × 203.1 mm × 41.5 mm (7.76" × 8.00" × 1.63") (W × D × H)
Packaging Dimensions	332.0 mm × 64.0 mm × 240.0 mm (13.07" × 2.52" × 9.45") (W × D × H)
Operating Temperature	-10 °C to +45 °C (+14 °F to +113 °F)
Storage Temperature	-20 °C to +60 °C (-4 °F to +140 °F)
Operating Humidity	10%~90% (RH), non-condensing
Installation	Desktop
Certifications	CE-LVD: IEC 62368-1:2014 CE-EMC: EN IEC 61000-3-2:2019, EN 61000-3-3:2013+A1:2019, EN 55032:2015+A11:2020, EN 55035:2017+A11:2020, EN 55024:2010+A1:2015, EN 50130-4:2011+A1:2014

Technical Specification	
Camera	
Model	B1A21N-U-0360B
Image Sensor	2 MP CMOS
Max. Resolution	1920 (H) × 1080 (V)
Scanning System	Progressive
Electronic Shutter Speed	PAL: 1/25 s–1/100,000 s; NTSC: 1/30 s–1/100,000 s
Min. Illumination	0.02 lux@F2.0 (Color, 30 IRE) 0.002 lux@F2.0 (B/W, 30 IRE) 0 lux (Illuminator on)
S/N Ratio	>65 dB
Illumination Distance	30 m (98.43 ft)
Illuminator On/Off Control	Auto/Manual
Illuminator Number	2 (IR light)
Angle Adjustment	Pan: 0°–360° Tilt: 0°–90° Rotation: 0°–360°

Lens					
Lens Type		Fixed-focal			
Lens Mount		M12			
Focal Length		3.6 mm			
Max. Aperture		F2.0			
Field of View		3.6 mm: H: 80°; V: 43°; D: 94°			
Iris Control		Fixed			
Close Focus Distance		3.6 mm: 0.8 m (2.62 ft)			
DORI Distance	Lens	Detect	Observe	Recognize	Identify
	3.6 mm	55.0 m (180.45 ft)	22.0 m (72.18 ft)	11.0 m (36.09 ft)	5.5 m (18.04 ft)

Video	
Video Frame Rate	CVI: PAL: 1080p@25 fps NTSC: 1080p@30 fps AHD: PAL: 1080p@25 fps NTSC: 1080p@30 fps TVI: PAL: 1080p@25 fps NTSC: 1080p@30 fps CVBS: PAL: 960H NTSC: 960H
Resolution	1080p (1920 × 1080); 960H (960 × 576/960 × 480)
Day/Night	Auto(ICR)/Color/B/W
BLC	BLC; DWDR
WDR	DWDR
White Balance	Auto
Gain Control	Auto
Noise Reduction	2D NR

Illumination Mode	Smart IR
Certification	
Certifications	CE-LVD: EN 62368-1; CE-EMC: EN 55032; EN 55035
Port	
Video Output	Video output choices of CVI/TVI/AHD/CVBS by one BNC port
Power	
Power Supply	12 VDC ± 30%
Power Consumption	Max 2.8 W (12 VDC, IR on)
Environment	
Operating Temperature	–40 °C to +60 °C (–40 °F to +140 °F)
Operating Humidity	<95% (RH), non-condensing
Storage Temperature	–40 °C to +60 °C (–40 °F to +140 °F)
Storage Humidity	<95% (RH), non-condensing
Protection	IP67
Anti-corrosion Level	Basic Protection

Structure	
Casing Material	Plastic
Product Dimensions	146.1mm × 70.0 mm × 69.8mm (5.75" × 2.76" × 2.75")
Net Weight	0.15 kg (0.33 lb)
Gross Weight	0.20 kg (0.44 lb)
Installation	Wall mount; ceiling mount; vertical pole mount

Technical Specification	
Camera	
Model	T1A21N-U-0360B
Image Sensor	2 MP CMOS
Max. Resolution	1920 (H) × 1080 (V)
Scanning System	Progressive
Electronic Shutter Speed	PAL: 1/25 s–1/100,000 s; NTSC: 1/30 s–1/100,000 s
Min. Illumination	0.02 lux@F2.0 (Color, 30 IRE) 0.002 lux@F2.0 (B/W, 30 IRE) 0 lux (Illuminator on)
S/N Ratio	>65 dB
Illumination Distance	25 m (82.02 ft)
Illuminator On/Off Control	Auto/Manual
Illuminator Number	1 (IR light)
Angle Adjustment	Pan: 0°–360° Tilt: 0°–78° Rotation: 0°–360°

Lens					
Lens Type		Fixed-focal			
Lens Mount		M12			
Focal Length		3.6 mm			
Max. Aperture		F2.0			
Field of View		3.6 mm: H: 80°; V: 43°; D: 94°			
Iris Control		Fixed			
Close Focus Distance		3.6 mm: 0.8 m (2.62 ft)			
DORI Distance	Lens	Detect	Observe	Recognize	Identify
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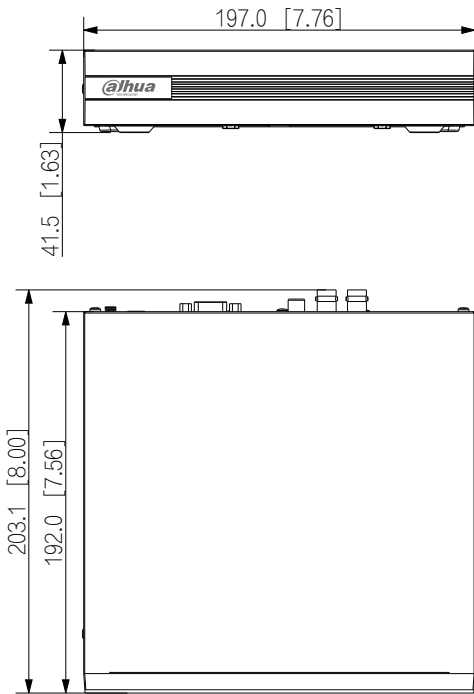
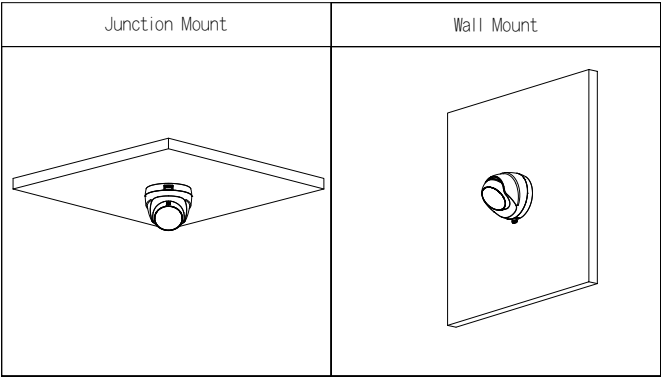
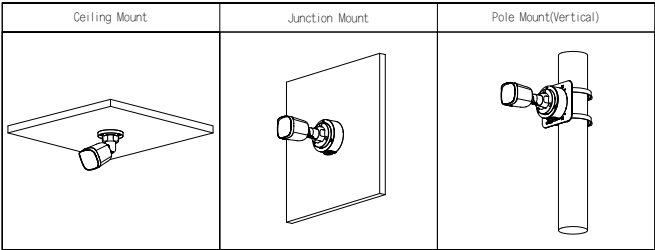
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Resolution	1080p (1920 × 1080); 960H (960 × 576/960 × 480)
Day/Night	Auto(ICR)/Color/B/W
BLC	BLC; DWDR
WDR	DWDR
White Balance	Auto
Gain Control	Auto
Noise Reduction	2D NR

Illumination Mode	Smart IR
Certification	
Certifications	CE-LVD: EN 62368-1; CE-EMC: EN 55032; EN 55035
Port	
Video Output	Video output choices of CVI/TVI/AHD/CVBS by one BNC port
Power	
Power Supply	12 VDC ± 30%
Power Consumption	Max 2.3 W (12 VDC, IR on)
Environment	
Operating Temperature	–40 °C to +60 °C (–40 °F to +140 °F)
Operating Humidity	<95% (RH), non-condensing
Storage Temperature	–40 °C to +60 °C (–40 °F to +140 °F)
Storage Humidity	<95% (RH), non-condensing
Anti-corrosion Level	Basic Protection

Structure	
Casing Material	Plastic
Product Dimensions	Φ85.0 mm × 77.1 mm (Φ3.35" × 3.04")
Net Weight	0.11 kg (0.24 lb)
Gross Weight	0.12 kg (0.26 lb)
Installation	Wall mount; ceiling mount

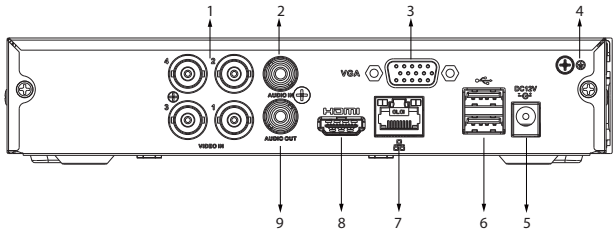
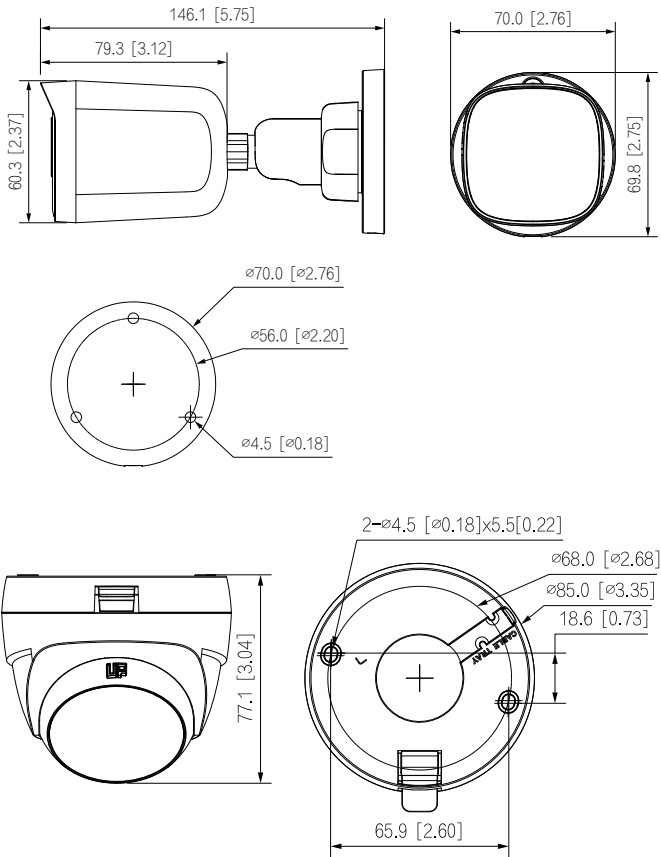
Ordering Information		
Type	Model	Description
Balun Series	DH-KIT/XVR1B04-I-SSD(512G)/2-B1A21N-U-0360B/2-T1A21N-U-0360B/Balun	1080P HDCVI Balun SSD KIT 4CH S-XVR with 4×1080P HDCVI Cameras

Installation



Panels

Dimensions (mm[inch])



- | | |
|----------------------------|---------------------------|
| 1 VIDEO IN | 2 AUDIO IN, RCA Connector |
| 3 VGA Port | 4 Ground |
| 5 Power Input | 6 USB Ports |
| 7 Network Port | 8 HDMI Port |
| 9 AUDIO OUT, RCA Connector | |