DH-XVR1B16H
16 Channel Penta-brid 4M-N/1080P Cooper 1U Digital Video Recorder

System Overview
Dahua, as a technology leader, is always the first ever developed the shining new technology in the security industry, and today we present Cooper Series XVR. Designed as a full compatibility product, XVR is able to provide end user the simplicity of analog system, namely lower system cost, simple installation and use of existing cable. And with the adoption of Smart H.265+/H.265, the series improves encoding efficiency, saving on bandwidth/storage costs. It is ideal for a wide range of civil applications such as retail store, home protection and so on.

Featuring high performance with attractive costs, the Cooper Series offers a great solution for users facing budget constraints who both require quality and performance.

Functions
Smart H.265+
Smart Codec, H.265+ can reduce up to 90% bit rate and storage requirements compared with H.264 without having to invest in new cameras.

HDCVI/AHD/TVI/CVBS/IP Auto-detect
The XVR can auto recognize the signal of front-camera without any setting. It makes operation more friendly and convenient.

High Definition Camera Input
The XVR supports up to 5MP HDCVI camera and 6MP IP camera input.

Coaxial Audio/Upgrade/Alarm
The integrated design can reduce wiring troubles which makes it much more cost-effective and convenient for installation.

· H.265+/H.265 dual-stream video compression
· Supports HDCVI/AHD/TVI/CVBS/IP video inputs
· Max 24 channels IP camera inputs, each channel up to 6MP;
Max 96Mbps incoming bandwidth
· Long transmission distance over coax cable
· Supports 1 SATA HDD, up to 6TB
· Smart Search and Intelligent Video System

Long Distance Transmission
The HDCVI system supports long distance transmission over coaxial cable and UTP, max. 700m for 4K/4MP, 800m for 1080P and 1200m for 720P.

Intelligent Video System (IVS)
With built-in intelligent video analytics, the XVR has the ability to detect and analyze moving objects for improved video surveillance. The XVR provides optional standard intelligence at the edge allowing detection of multiple object behaviors such as abandoned or missing objects. IVS also supports Tripwire analytics, allowing the camera to detect when a pre-determined line has been crossed.

Face Detection
It is a typical technology being used in a variety of applications for searching or identification of individuals.

Smart Search
This function helps you get more motion detect video during a short time through drawing a region when playback. It is very useful when an emergency occurs.
## Technical Specification

### System
- **Main Processor**: Embedded Processor
- **Operating System**: Embedded LINUX

### Video and Audio
- **Analog Camera Input**: 16 Channel, BNC
- **HDCVI Camera**: 5MP, 4MP, 1080P@25/30fps, 720P@50/60fps, 720P@25/30fps
- **AHD Camera**: 5MP, 4MP, 1080P@25/30, 720P@25/30fps
- **TVI Camera**: 5MP, 4MP, 1080P@25/30, 720P@25/30fps
- **CVBS Camera**: PAL/NTSC
- **IP Camera Input**: 16+8CH, each channel up to 6MP
- **Audio In/Out**: 1/1, RCA
- **Two-way Talk**: Reuse audio in/out, RCA

### Recording
- **Video Compression**: H.265+/H.265/H.264+/H.264
- **Resolution**: 5M-N, 4M-N, 1080P, 1080N, 720P, 960H, D1, CIF
- **Record Rate**
  - Main Stream: the 1st & 2nd channels 5M-N(1~10fps); other channels 4M-N/1080P(1~15fps); 1080N/720P/960H/D1/CIF(1~25/30fps)
  - Sub stream:CIF/QCIF(1~15fps)
- **Video Bit Rate**: 32Kbps ~ 6144Kbps Per Channel
- **Record Mode**: Manual, Schedule (General, Continuous), MD (Video detection: Motion Detection, Video Loss, Tampering), Alarm, Stop
- **Record Interval**: 1 ~ 60 min (default: 60 min), Pre-record: 1 ~ 30 sec, Post-record: 10 ~ 300 sec
- **Audio Compression**: AAC(only for the 1st channel), G.711A, G.711U, PCM
- **Audio Sample Rate**: 8KHz, 16 bit Per Channel
- **Audio Bit Rate**: 64Kbps Per Channel

### Display
- **Interface**: 1 HDMI, 1 VGA
- **Resolution**: HDMI: 3840×2160, 2560×1440, 1920×1080, 1280×1024, 1280×720
  - VGA: 1920×1080, 1280×1024, 1280×720
- **Multi-screen Display**: When IP extension mode not enabled: 1/4/8/9/16
  - When IP extension mode enabled: 1/4/8/9/16/25
- **OSD**: Camera title, Time, Video loss, Camera lock, Motion detection, Recording

### Network
- **Interface**: 1 RJ-45 Port (1000M)
  - (Supports Dahua IP camera, DVR, NVS, etc.)
- **Max. User Access**: 128 users
- **Smart Phone**: iPhone, iPad, Android
- **Interoperability**: ONVIF 16.12, CGI Conformant

### Video Detection and Alarm
- **Trigger Events**: Recording, PTZ, Tour, Video Push, Email, FTP, Snapshot, Buzzer and Screen Tips
- **Video Detection**: Motion Detection, MD Zones: 396 (22 × 18), Video Loss, Tampering and Diagnosis
- **Alarm input**: N/A
- **Relay Output**: N/A

### Playback and Backup
- **Playback**: 1/4/8/16
- **Search Mode**: Time /Date, Alarm, MD and Exact Search (accurate to second)
- **Playback Function**: Play, Pause, Stop, Rewind, Fast play, Slow Play, Next File, Previous File, Next Camera, Previous Camera, Full Screen, Repeat, Shuffle, Backup Selection, Digital Zoom
- **Backup Mode**: USB Device/Network

### Storage
- **Internal HDD**: 1 SATA Port, up to 6TB capacity
- **eSATA**: N/A

### Auxiliary Interface
- **USB**: 1 USB 2.0, 1 USB 3.0
- **RS232**: N/A
- **RS485**: N/A

### Electrical
- **Power Supply**: DC12V/2A
- **Power Consumption (Without HDD)**: <10W

### Construction
- **Dimensions**: Compact 1U, 260×236×48mm(10.2”×9.3”×1.9”)
- **Net Weight (without HDD)**: 0.86kg (1.90lb)
- **Gross Weight**: 1kg (2.2lb)
- **Installation**: Desktop installation

### Environmental
- **Operating Conditions**: -10°C ~ +45°C (+14°F ~ +113°F), 10~ 90% RH
- **Storage Conditions**: -20°C ~ +70°C (-4°F ~ +158°F), 0~ 90% RH

### Third-party Support
- **Third-party Support**: Dahua, Arecont Vision, AXIS, Bosch, Brickcom, Canon, CP Plus, Dynacolor, Honeywell, Panasonic, Pelco, Samsung, Sanyo, Sony, Videotec, Vivotek, and more

### Certifications
- **Third-party Support**: Dahua, Arecont Vision, AXIS, Bosch, Brickcom, Canon, CP Plus, Dynacolor, Honeywell, Panasonic, Pelco, Samsung, Sanyo, Sony, Videotec, Vivotek, and more
- **FCC**: Part 15 Subpart B
- **CE**: CE-LVD: EN 60950-1/IEC 60950-1
  - CE-EMC: EN 61000-3-2, EN 61000-3-3, EN 55032, EN 55013, EN 55024
- **UL**: UL 60950-1
### Ordering Information

<table>
<thead>
<tr>
<th>Type</th>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>16 Channel XVR</td>
<td>DH-XVR1B16H</td>
<td>16 Channel Penta-brid 4M-N/1080P Compact 1U Digital Video Recorder</td>
</tr>
</tbody>
</table>

### Rear Panel

DH-XVR1B16H

1. VIDEO IN
2. AUDIO IN, RCA Connector
3. AUDIO OUT, RCA Connector
4. VGA Interface
5. HDMI Interface
6. USB Interface
7. Network Interface
8. DC12V Power Input