



# VIP X2 Dual-channel Video Encoder



- ▶ **Dual-channel encoder**
- ▶ **High-quality MPEG-4**  
@ full D1/4CIF/2CIF/Half D1/CIF/QCIF
- ▶ **USB and iSCSI recording**
- ▶ **Storage-efficient Dual Streaming**
- ▶ **Ultra-compact size**
- ▶ **Multicast & Internet streaming**
- ▶ **Alarm inputs & relay output**
- ▶ **FastEthernet interface**
- ▶ **Serial data port**
- ▶ **Audio model**

The VIP X2 features 2 DVD like quality MPEG-4 video signals, at up to 30 images per second, per channel, over IP networks.

This unit supports PAL/NTSC sources.

The VIP X2 is ultra-compact, so it is perfect for any application that depends on space-saving solutions.

The VIP X2 is available as audio model, providing bi-directional audio communication in parallel to video.

Besides the standard line level interfaces for both audio channels, it has integrated amplifiers to directly connect to microphone and speaker for channel1.

## Functions

### Viewing

The video can be viewed on a PC using VIDOS, the Bosch comprehensive video management system, or in a simple Web browser such as Internet Explorer. It can also be integrated into other video management systems using the Bosch Video SDK.

By routing the IP video to a high performance VIP XD video decoder or a VIDOS Monitor Wall you can present the video with ultimate clarity on an analog CCTV or large, flat-screen VGA monitor or TV.

### Recording

The VIP X2 offers unparalleled recording options - locally on a USB hard disk, network-attached utilizing iSCSI devices, and of course centrally using Network Video Recorders. The iSCSI RAID5 storage enables the VIP X2 to act as a conventional DVR as well as to stream high performance live video across the network.

### Dual Streaming

The VIP X2 uses Dual Streaming to generate two independent IP video streams per channel. This allows viewing and recording at two different quality levels to save disk space and bandwidth. On alarm, it may send out email with JPEG images attached.

### Increased intelligence

The VIP X2 supports increased intelligence at the edge that includes detection of:

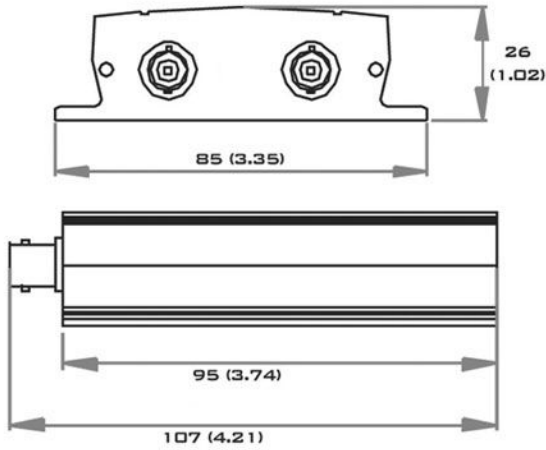
- video loss
- masking
- hooding
- defocusing
- diverted camera

These detection features provide tamper detection for various unified picture causes.

More advanced video content analysis (VCA) applications are offered with Bosch's Intelligent Video Motion Detection

(IVMD) as additional licensable option, giving VCA directly at the video input.  
 These powerful devices represent the cutting edge of high performance Video over IP for CCTV today.

**Installation/Configuration Notes**



Dimensions in mm (inches)



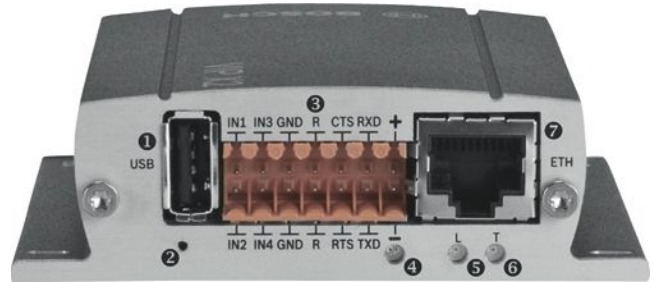
Front view VIP X2, non audio model

- 1 Video In 1
- 2 Video In 2



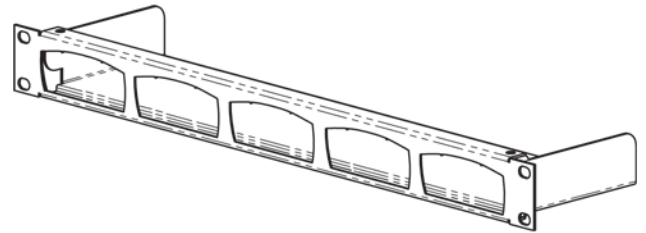
Front view VIP X2 audio model

- 1 Video In 1
- 2 Line In
- 3 Microphone In , Speaker Out
- 4 Line out
- 5 Video In 2



Rear view all models

- 1 USB port
- 2 Reset: Factory Default
- 3 Alarm in, Relay out, Power, COM (RS 232/422/485)
- 4 LED Power
- 5 LED Link
- 6 LED Traffic
- 7 10/100 Base-T Fast Ethernet



Rack mount kit (optional)

**Parts Included**

Quantity	Component
1	VIP X2 Dual-channel Video Encoder
1	International plug-in power supply
1	RS-232 null modem cable
1	Quick Installation Guide
1	CD-ROM containing manual, software and tools

## Technical Specifications

### Electrical

Video Standards	MPEG-4; JPEG
Video Data Rate	9.6 kbps - 6 Mbps per channel
Video Resolution	704 x 576/480 (4CIF/D1: 25/30 IPS) 704 x 288/240 (2CIF: 25/30 IPS) 464 x 576/480 (2/3 D1: 25/30 ips) 352 x 576/480 (Half D1: 25/30 IPS) 352 x 288/240 (CIF: 25/30 IPS) 176 x 144/120 (QCIF: 25/30 IPS)
GOP Structure	I, IP
Overall Delay	120 ms
Network Protocols	RTP, Telnet, UDP, TCP, IP, HTTP, IGMPv2/v3, ICMP, ARP, SNMP
Software Update	Flash ROM, remote programmable
Configuration	Configuration Manager, Web browser
<b>interfaces</b>	
Video In	2x analog composite: NTSC/PAL; BNC connector 75 Ohm switchable, 0.7 - 1.2 Vp-p
Alarm In	4x (non-isolated closure contact type), max. activation resistance 10 Ohm
Relay Out	1x, 30 Vp-p, 2 A
Connectors	14 position spring clamp contact for alarm, re- lay and COM port
COM Port	1x RS-232/422/485, spring clamp contacts
USB Port	1x 2.0 external interface
Ethernet	10/100Base-T, auto-sensing, half/full duplex, RJ-45
<b>Audio Model</b>	
Audio Standard	G.711; 300 Hz - 3.4 kHz
Audio Data Rate	80 kBit/s
Audio Sampling Rate	8 kHz
Line In	Dual channel via stereo jack 3.5 mm, 9 kOhm typ., 5.5 Vpp max.
Line Out	Dual channel via stereo jack 3.5 mm, 16 Ohm min., 3 Vpp max.
Microphone In	CombiCon plug, 2kOhm typ., 2.8 Vpp max. -20dB, supply 2.3 V typ.
Speaker Out	CombiCon plug, 4 Ohm min., 6 Vpp max., power RMS 1 W
<b>Environmental</b>	
Input Voltage	12 - 24 VDC, spring clamp contact
Power Consumption	Approx. 10 VA
Power Supply Unit	VIPXPS111022 included in the box
Weight	Approx. 0.2 kg (0.44 lb)

Operating Temperature	0°C - 40°C (32°F - 104°F) ambient temperature
Humidity	20 - 80%, atmospheric humidity (not cond.)
Complies with	CE: IEC 60950; UL 1950; AS/NZS 3548; EN 55103-1, -2; EN 50130-4; EN 55022; EN 55024; EN 61000-3-2; EN 61000-3-3; FCC 47 CFR Ch.1 Part 15

## Ordering Information

### Model | Description

VIP X2	MPEG-4 dual-stream 2 ch encoder, USB, serial I/O, alarm in and relay
VIP X2A	MPEG-4 dual-stream 2 ch encoder, USB, audio, serial I/O, alarm in, relay

### Accessories

VIPRMK1HU	VIP X/10/1000 Rack Mount Kit (5 units in 1HU)
VIPXPS111022	Power supply
DVA-12T-04050RA	iSCSI RAID5, 12 bay 1.5 TByte net capacity (4 hard drives installed)
DVA-12T-12050RA	iSCSI RAID5, 12 bay, 5.5 TByte net capacity (12 hard drives installed)

### Software Options

VIP-X2-FS1	VIP X2 IVMD 1.0 VCA License, valid for 2 channels
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