



From		Telephone	Nuremberg
STVC/PRM	Product Management	+49 911 93456 0	18.12.2009

Release Letter

Products:	<i>AutoDome IP, Dinion IP</i> <i>Extreme IP, Flexidome IP</i> <i>VIP X1600, VIP XD</i> <i>VideoJet X10 / X20 / X40 / SN</i>
Version:	<i>4.10.0019 (VIPX)</i>

This letter contains latest information about the above mentioned firmware version.

1. General

BVIP firmware version 4.10.0019 is an update release for the VIPX technology-based Bosch Video IP platform products, applicable for all mentioned products above (not for VIP X1 and VIP X2).

BVIP firmware version 4.10.0019 introduces new features – the most important one is full ONVIF conformance of all encoders and cameras where this firmware is applicable to - and mainly improvements.

The large increment on features in firmware 4.x has lead to an almost full utilization of available Flash memory. Thus, the firmware can only hold 2 languages which are English plus another one, and a number of firmware packages will be provided accordingly.

Note:

All units to be upgraded to this version need to have firmware 3.x or higher installed previously.

Note:

This release letter provides information about the new features and how they can be used as the documentation will not be updated for this version but remains at the state of firmware 4.00.



From		Telephone	Nuremberg
STVC/PRM	Product Management	+49 911 93456 0	18.12.2009

2. New Features

- ONVIF 1.0 compliance fully achieved
PTZ, event and imaging services are now also supported.
Firmware is fully compliant with the official ONVIF Test Tool 1.01.
- Fixed cameras and encoders allow Privacy Masking with up to 8 independent areas.
Masks can be defined via a graphical user interface in the Web browser and can be coloured white, grey or black.
- MPEG-4 only mode can be selected where no H.264 encoding is required to achieve encoding performance values similar to FW 3.5x where the encoder is already at a critical performance level. This mode automatically disables the image stabilization function for VCA.
- VIP X1600 XFM4 H.264 encoder modules support reduction of encoding bandwidth during no-motion periods. This function requires high quality video input signal with low noise to work effectively.

Note:

This function uses target data rate and max data rate as delimiting parameters where the target bit rate represents the no-motion value. The encoder evaluates if there is motion in the scene and switches to the maximum data rate to achieve best quality also for the moving parts. Once the scene became quiet again, after a few seconds the bit rate drops again to the target bit rate.

To ensure keeping the functionality of the encoders identical to with previous firmware versions the default profile settings have been modified. Profiles that have been modified by users to not use the default settings need to be modified manually. Also profiles that are or were used for recording need to be modified or set to default manually. Otherwise those encoders will go for the maximum bit rate if there is motion or noise in the scene, instead of using the target bit rate as before. This has an impact especially on the required recording space.

This function is enabled with maximum data rate more than 10% higher than target data rate.

- VIP X1600 base systems support RSTP (Rapid Spanning Tree Protocol) to allow redundancy connections in networks.
This function is described in the existing documentation.
- VIP X1600 base systems support Static Port Trunking. This allows aggregation of Ethernet interfaces to achieve higher bandwidth to the network.
This function is described in the existing documentation.
- Replay from iSCSI can be tunnelled via HTTP port which allows replay via WAN connections using NAT/PAT.
- New IVA versions can be tested during a 30-day trial period, beginning with upgrading to a firmware including a new IVA version.
- MOTION+ alarms can be applied with a de-bounce time of 1 second to reduce event load to management systems.
- Multiple MOTION+ or IVA alarms can be aggregated over a configurable time period.
- RTSP audio connections now use 8 kHz timestamps to allow audio with standard media players like Quicktime or VLC.



From		Telephone	Nuremberg
STVC/PRM	Product Management	+49 911 93456 0	18.12.2009

- On-screen display at analog Dinion cameras can be reached via Web browser interface.
- NTCIP support for Autodome IP
- uPNP support for MS Windows XP and Vista

3. Changes

- An issue with VJ-X20 in VCA mode, not allowing IVA without a license installed has been fixed. It is now not required to purchase an IVA license for VCA functionality.
- IP Matrix has been enhanced to also support VJ8008.
- The enhanced function to save bandwidth during no activity in scenes may change the behaviour of VIP X1600 XFM4 H.264 encoder modules.

Note:

Profiles that have been modified by users to not use the default settings need to be modified manually. Also profiles that are or were used for recording need to be modified or set to default manually.

Otherwise those **encoders will go for the maximum bit rate** if there is motion or noise in the scene, instead of using the target bit rate as before.

This has an impact especially on the required recording space.

4. Restrictions; Known Issues

- Mixture between video standards, e.g. PAL encoder connected to NTSC decoder, is not supported.
- In QCIF resolution, stamping is not available.
- Occasional audio drop-outs may occur when replaying recordings from USB hard drive when recording with high performance is active. The recording itself has all data, and a local backup allows to smoothly retrieve all footage inclusive audio data.
- When decoding multiple video streams in parallel with a VIP XD, the visible video quality on the display may be reduced, especially for 4CIF/D1 streams. This has no effect on the quality of recordings of the same stream(s).
- With encoder settings in combination with video content analysis (VCA) that exceed the available calculation power, VCA may not always work properly. Encoder settings and/or sensitive area settings for VCA must be adjusted.
- After firmware upload while summertime checkbox is activated the time zone must be adjusted.
- When filling an empty DST table and then update time zone too quickly, it may happen that time is shifted by 1 hour.



From		Telephone	Nuremberg
STVC/PRM	Product Management	+49 911 93456 0	18.12.2009

- After reboot, the system time re-synchronisation may be delayed up to 9 seconds for SNTP respectively up to 14 seconds for time server protocol.
- Resolutions for RTSP are depending on player capability.
- AUX commands with VideoJet X family are only possible for Autodomes.
- Ethernet daisy-chaining of VIP-X1600-XFB or VideoJet X is limited to 3 units.
- LUN size for local recording via "Direct iSCSI" is limited to 2 TB.
- VRM versions earlier than 2.0 will not be able to replay recordings from blocks that are recorded with FW 4.0
- When switching the encoding type while recording is active only the footage of the latest set encoding type can be replayed from this recording track.
- When upgrading to firmware 4.10 from 3.x while recording is active it may happen that recording is not restarted automatically after reboot. A manual restart may be necessary. It is advisable to deactivate recording during firmware upgrade.
- When upgrading to firmware 4.10 from 3.x with Multicast addresses configured it may happen that these get lost. It must be ensured that the settings still exist, else be re-created.
- VIP X1600 XFM4 H.264 encoder modules only support grey colour for Privacy Masking areas.
- LACP, though mentioned in the documentation, is not supported by VIP X1600.
- For correct communication between the modules and the built-in switch in a VIP X1600, it must be ensured that the IP address 1.1.1.1 is not used elsewhere in the network.
- Due to limited computational power of the built-in switch in VIP X1600, IGMP Querying should only be activated in small network segments with no more than 3 VIP X1600 base systems respectively no more than 12 devices or modules.
IGMP Querying in VIP X1600 must be deactivated if a network switch can take over this task.

5. System Requirements

- Microsoft Internet Explorer 6.0 or higher
- SUN Java Virtual Machine version 1.6.0_14
- DirectX 9.0c
- MPEG-ActiveX 4.40.01.07 or newer
- Configuration Manager 2.11.0011 or newer