



Omnicast™ 4.4 Hardware Integration Add-On

Release Notes

September 14, 2009



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OMNICAST

Enterprise Security Software IP Video Surveillance



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OMNICAST

Enterprise Security Software IP Video Surveillance



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Introduction

Omnicast 4.4 Hardware Integration Add-On package increases the set of supported video units in Omnicast Enterprise 4.4. This document describes the release in detail, including release features, installation instructions, and a list of known issues and limitations.

Contacting Technical Support

You can reach Genetec's Technical Assistance Center (GTAC) in the following ways:

- GTAC website: <https://gtap.genetec.com/>
- Email: support@genetec.com
- Telephone: 1-866-338-2988 (Canada and US only) or 1-514-856-7100
- FAX : 1-514-332-1692

When contacting the GTAC, please have ready all the relevant information describing the problem or question, including System ID and version information. This information appears in the About dialog from the Help menu.

Features and Enhancements

The Omnicast 4.4 Hardware Integration Add-On package increases the set of video units supported by Omnicast 4.4.

| Manufacturer | Unit Models | Extension |
|-----------------------|--|--------------|
| Bosch | <ul style="list-style-type: none"> · EX36 · EX7 · EX30 · EX80 · EX82 | Generic |
| GSG | <ul style="list-style-type: none"> · KLIS360-5M | Generic |
| JVC (Generic Plus) | <ul style="list-style-type: none"> · VN-V25U · VN-V26U · VN-V225VPU/ VN-225U · VN-V685U · VN-V686BU · VN-V686WPBU · VN-X35U · VN-X235VPU/ VN-X235U | Generic Plus |
| Mango DSP | <ul style="list-style-type: none"> · Condor VS-8 · Condor VS-16 | Generic |
| Optelecom-NKF | <ul style="list-style-type: none"> · Siquira FD-22 · Siquira BC-20 · Siquira BC-22 · Siquira BC-24 | Generic |
| | <ul style="list-style-type: none"> · C-40 · S-44 · C-44 | Generic Plus |
| Panasonic | <ul style="list-style-type: none"> · NP502 · NW502 | Generic |
| Teleste | <ul style="list-style-type: none"> · MPX-E8 | Generic |

Installation Instructions

You must install this package on all computers running the Archiver service or any of the Omnicast client applications.

To install the Omnicast 4.4 Hardware Integration Add-On package:

- 1 Open the Server Admin and stop the Archiver service.
- 2 Close the Server Admin and Discovery Tool.
- 3 In the Hardware Integration Package folder, click **Setup.exe**.
- 4 Follow the instructions in the install wizard for installing the Hardware Integration package.

Once you have installed the release package, make sure the extension (Generic or Generic Plus) you want to use is available in the Server Admin. If it is not available, you'll need to create the Archiver extension, see "Creating an Archiver extension" in the *Omnicast Administrator Guide*.

You can use the Omnicast Config Tool to add the video units to the Omnicast system. For instructions on adding video units, see the "Adding Video Units" section in the *Omnicast Administrator Guide*.

Configuring Optelecom-NKF and Teleste MPX-E8 Units

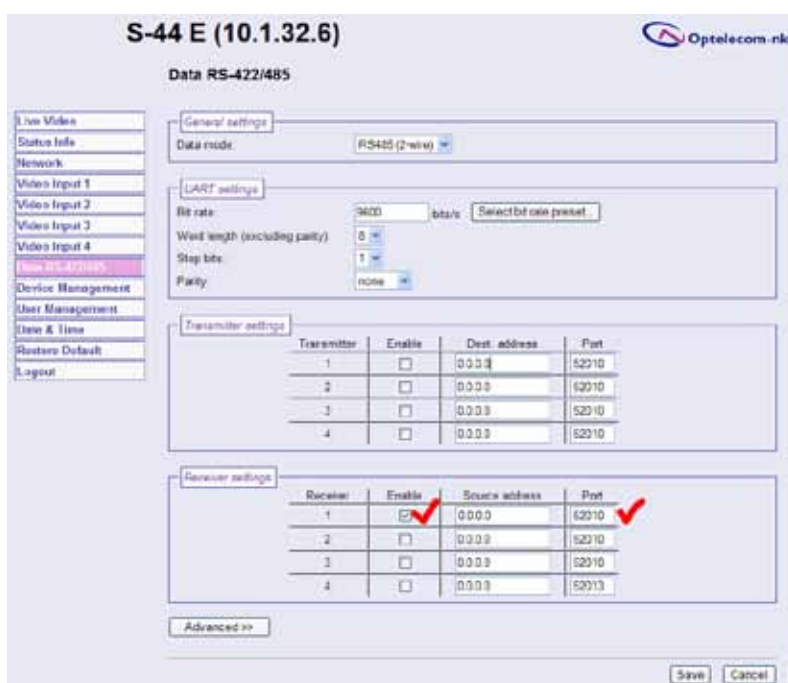
The Optelecom-NKF and Teleste MPX-E8 units require some configuration in order to enable their features.

Configuring Optelecom-NKF Units for PTZ Controls

To control the PTZ Motors on the Optelecom-NKF units, you must configure the camera from its web page. You can open a camera's web page from the Omnicast Config Tool.

To configure Optelecom-NKF units for PTZ controls:

- 1 Open the Omnicast Config Tool, and in the view pane, select **Physical View**.
- 2 Click on the Archiver, and select **Optelecom-NKF**.
- 3 In the configuration pane, click **Specific settings** tab, and click **Launch Web Access**.
The camera web page opens in a browser window.
- 4 From the the web page, click one of the following tabs: **Data RS-422/485**, **Data RS-232**, or **Data**.
- 5 Make sure that all the General settings and the UART settings specify the PTZ motor hardware connections connected to the camera.



S-44 E (10.1.32.6) Optelecom-nkf

Data RS-422/485

General settings
Data mode: RS485 (2-wire)

UART settings
Bit rate: 3600 bps Select bit rate preset
Word length (including parity): 8
Stop bits: 1
Parity: none

Transmitter settings

| Transmitter | Enable | Dest. address | Port |
|-------------|--------------------------|---------------|-------|
| 1 | <input type="checkbox"/> | 0.0.0 | 52010 |
| 2 | <input type="checkbox"/> | 0.0.0 | 52010 |
| 3 | <input type="checkbox"/> | 0.0.0 | 52010 |
| 4 | <input type="checkbox"/> | 0.0.0 | 52010 |

Receiver settings

| Receiver | Enable | Source address | Port |
|----------|-------------------------------------|----------------|-------|
| 1 | <input checked="" type="checkbox"/> | 0.0.0 | 52010 |
| 2 | <input type="checkbox"/> | 0.0.0 | 52010 |
| 3 | <input type="checkbox"/> | 0.0.0 | 52010 |
| 4 | <input type="checkbox"/> | 0.0.0 | 52013 |

Advanced >>

Save Cancel

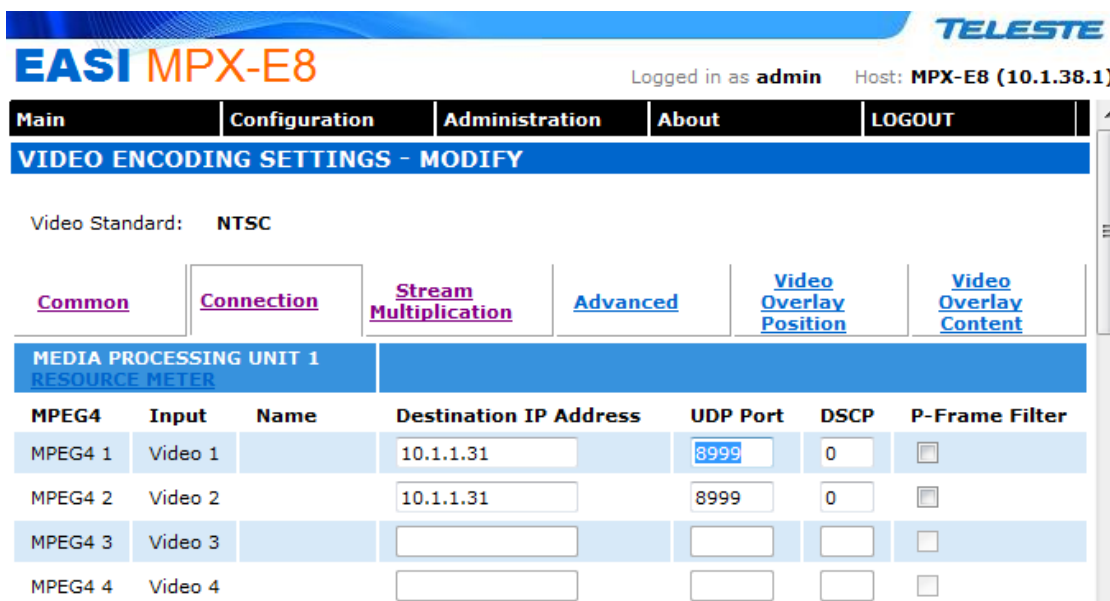
- 6 In the Receiver settings, make sure the Receiver 1 Enable check box is selected, and the Receiver 1 port is set to **52010**. Note, only one receiver can be configured per unit.
- 7 Click **Save**.

Configuring Teleste MPX-E8 Unit for RTSP

In Omnicast, to stream video from the MPX-E8 encoder, the unit has to be configured for Real-Time Streaming Protocol (RTSP) support. From the driver's web page, you'll enable RTSP and configure the video parameters on the individual video streams.

To configure the Teleste MPX-E8 unit for RTSP:

- 1 Open the Config Tool, and in the view pane, select **Physical View**.
- 2 Click on the Archiver, and select **Teleste MPX-E8 8 Inputs Units**.
- 3 In the configuration pane, click **Specific settings** tab, and click **Launch Web Access**.
The camera web page opens in a browser window.
- 4 Log on to the unit:
Default user: **admin**
Default password: **easix**
- 5 From the **Configuration** menu, select **Video**.
- 6 From the Video Encoding Settings page, select **Edit Video Encoding Settings**.
- 7 In the **Common** tab, select **MPEG4 1** and **MPEG4 2** check boxes.
- 8 In the **Connection** tab, specify the **Destination IP Address**, and the **UDP Port** for each stream.
Note While these fields are required, you can enter any value in this field, it will not affect the RTSP streaming in Omnicast.



The screenshot shows the 'EASI MPX-E8' web interface. The user is logged in as 'admin' on host 'MPX-E8 (10.1.38.1)'. The 'Configuration' menu is open, and the 'VIDEO ENCODING SETTINGS - MODIFY' page is displayed. The 'Connection' tab is selected, showing a table for configuring video streams.

| MPEG4 | Input | Name | Destination IP Address | UDP Port | DSCP | P-Frame Filter |
|---------|---------|------|------------------------|----------|------|--------------------------|
| MPEG4 1 | Video 1 | | 10.1.1.31 | 8999 | 0 | <input type="checkbox"/> |
| MPEG4 2 | Video 2 | | 10.1.1.31 | 8999 | 0 | <input type="checkbox"/> |
| MPEG4 3 | Video 3 | | | | | <input type="checkbox"/> |
| MPEG4 4 | Video 4 | | | | | <input type="checkbox"/> |

- 9 To enable RTSP on the device, in the **Configuration** menu, select **RTSP**, and click **Edit RTSP Settings**.
- 10 From the Real Time Streaming Protocol (RTSP) Settings page, select the RTSP Service **enabled** check box, and click **Enable All** to select all the Inputs RTSP Enabled check boxes.

Supported Video Units

This section includes the firmware compatibility matrix, limitations, and known and resolved issues for each supported hardware device.

The Firmware Compatibility Matrix lists the supported video unit models. For each unit model, the firmware, the certification level, and the Archiver extension is listed.

There are three levels of integration certification:

- *Certified*. The Omnicast integration with this device model has been tested and validated by Genetec.
- *Supported by design*. The device model shares the same API as an existing certified device unit, but has not been tested or validated by Genetec.
- *Tested by partner*. The Omnicast integration with this camera model has been tested by the partner and is has not been certified by Genetec.

The Limitations section describes features not available in this integration release. The Restrictions section describes Omnicast integration issues. Lastly, the Addressed Issues section describes issues fixed in this release.

Arecont

Firmware Compatibility Matrix

| Unit Type | Firmware Version | Certification | Archiver Extension |
|-----------|------------------|-------------------|--------------------|
| AV8185 | ---- | Tested by partner | Generic |
| AV8365 | ---- | Tested by partner | Generic |

Limitations

For a list of Generic extension unit limitations, see “Omnicast Generic Extension Unit Limitations” on page 21.

Restrictions

None

Addressed Issues

None

Bosch

Firmware Compatibility Matrix

| Unit Type | Firmware Version | Certification | Archiver Extension |
|-----------|------------------|---------------------|--------------------|
| EX36 | 08500352 | Certified | Generic |
| EX7 | ---- | Supported by design | Generic |
| EX30 | ---- | Supported by design | Generic |
| EX80 | ---- | Supported by design | Generic |
| EX82 | ---- | Supported by design | Generic |

Limitations

- Not compatible with Omnicast versions *earlier* than 4.4.
- You cannot change the JPEG image size in Omnicast. To change the default image, you'll need to modify the Bosch (JPEG) CAM file.

NOTE Modifying the CAM file does not affect existing cameras in Omnicast. Only the cameras that are added after installing this release are affected by the modification.

To change the JPEG image size for Bosch cameras:

- 1 Open the Bosch CAM file, located in Client\Common\DVR Software 4.4\Extensions\Cam Files.
- 2 Specify the JPEG <image size> on the following line:
`<JpegURLs>snap.jpg?JpegSize=<image size>&&JpegCam=1</JpegURLs>`
 The default JPEG image size is set to XL.

You can specify the following sizes:

| JpegSize= | Description | Dimension in Pixels |
|-----------|--------------------|---------------------|
| S | Small (QCIF) | 176 x 144 |
| M | Medium (CIF) | 352 X 288 |
| XL | Extra Large (4CIF) | 704 x 576 |

- For a list of Generic extension unit limitations, see "Omnicast Generic Extension Unit Limitations" on page 21.

Known Issues

13747 When there is rapid movement in front of the camera, the video stream stops temporarily in the Config Tool viewer (Live video dialog) and in the Live Viewer.

Addressed Issues

None

GSG

Firmware Compatibility Matrix

| Unit Type | Firmware Version | Certification | Archiver Extension |
|------------|---------------------|---------------|--------------------|
| KLIS360-5M | r6340 hw1.2 1.8.1.8 | Certified | Generic |

Limitations

For a list of Generic extension unit limitations, see “Omnicast Generic Extension Unit Limitations” on page 21.

Known Issues

13532 The frame rate for Motion JPEG (MJPEG) is less than 10 fps.

Addressed Issues

None

JVC

Firmware Compatibility Matrix

| Unit Type | Firmware Version | Certification | Archiver Extension |
|------------------------|---------------------|---------------|--------------------|
| VN-V25U | 2.00 | Certified | Generic Plus |
| VN-V225VPU/ VN-225U | 1.01 | Certified | Generic Plus |
| VN-V26U | 2.00 | Certified | Generic Plus |
| VN-V685U | IP = 2.00 SM = 3.00 | Certified | Generic Plus |
| VN-V686BU | IP = 2.00 SM = 3.00 | Certified | Generic Plus |
| VN-V686WPBU | IP = 2.00 SM = 3.00 | Certified | Generic Plus |
| VN-X35U | 1.01a | Certified | Generic Plus |
| VN-X235U/ VPU | 1.02 | Certified | Generic Plus |

Limitations

- You cannot set the HTTP port and IP address settings at the same time.

To change both the HTTP port and the IP settings:

- In the unit's **Network Settings** tab, specify the **HTTP port**, and click **Reboot**.
- Change the IP settings, and click **Reboot**.

- The JVC Megapixel camera MJPEG and MPEG-4 video stream settings are incompatible when one stream is set to 640x480 and the other to 320x240. For example, if the MJPEG video stream is set to 640x480 and the MPEG-4 video stream is set to 320x240, then an "Invalid configuration in unit" event notification is sent.
- The valid range for the frame rate setting is 1 to 255 images. If you move the frame rate slider above 255, the value will be set to 255 on the unit.
- MJPEG multicast streaming is not supported. The Archiver is capable of redirecting the unicast stream in multicast.
- IMPORTANT** Before uninstalling the Hardware Integration Package, you must delete the Generic Plus extension.

14144 Motion detection in MPEG-4 is not supported.

14003 When adding the unit on a Failover Archiver, the Video quality settings will temporarily switch to the default settings.

Restrictions

- 14074 When setting the brightness value to a very low value (for example, -80, -100), the video stream brightness will fluctuate between completely black to normal clear.
- 14085 On JVC VN-685U units, a PTZ preset cannot be saved when using the unit's digital zoom. When you zoom to the maximum Optical zoom value, the PTZ stops. When you press the Zoom button, the digital zoom functionality is activated. When digital zoom is activated in this way the preset will not be saved.
- 14105 JVD: Export to ASF changes the resolution to 320x240
- 14075 In the Live Viewer, when the Playback Alarm is triggered, the sequence starts glitching when reaching the end of the playback sequence.

Addressed Issues

None

Mango DSP

Firmware Compatibility Matrix

| Unit Type | Firmware Version | Certification | Archiver Extension |
|--------------|------------------|-------------------|--------------------|
| Condor VS-8 | ---- | Tested by partner | Generic |
| Condor VS-16 | ---- | Tested by partner | Generic |

Limitations

For a list of Generic extension unit limitations, see “Omnicast Generic Extension Unit Limitations” on page 21.

Known Issues

None

Addressed Issues

None

Optelecom-NKF Driver

Firmware Compatibility Matrix

| Unit Type | Firmware Version | Certification | Archiver Extension |
|-----------|------------------|---------------|--------------------|
| C-40e | 1.1.18.07170756 | Certified | Generic Plus |
| S-44e | 1.2.4 | Certified | Generic Plus |
| C-44e | 1.1.1.alpha.3 | Certified | Generic Plus |

Limitations

None

Known Issues

11798 AP Crash when viewing video from the new Optelecom-NKF driver

14144 Motion detection in MPEG-4 is not supported.

Addressed Issues

None

Optelecom-NKF FD2x and BC2x.Cameras

Firmware Compatibility Matrix

| Unit Type | Firmware Version | Certification | Archiver Extension |
|--------------|------------------|---------------|--------------------|
| Siqura FD-22 | 080828 | Certified | Generic |
| Siqura BC-20 | 080828VP | Certified | Generic |
| Siqura BC-22 | 080828P | Certified | Generic |
| Siqura BC-24 | 080108P | Certified | Generic |

Limitations

- Supports unicast streaming only.
- For a list of Generic extension unit limitations, see "Omnicast Generic Extension Unit Limitations" on page 21.

Known Issues

- 12806 When decoded, the Optelecom-NKF BC-2x and FD-2x MJPEG is pixelized.
- 13533 Motion detection in MJPEG and MPEG-4 is not supported.

Addressed Issues

None

Panasonic

Firmware Compatibility Matrix

| Unit Type | Firmware Version | Certification | Archiver Extension |
|-----------|------------------|---------------------|--------------------|
| NP502 | 1.01 | Supported by design | Generic |
| NW502 | ---- | Supported by design | Generic |

Limitations

For a list of Generic extension unit limitations, see “Omnicast Generic Extension Unit Limitations” on page 21.

Known Issues

None

Addressed Issues

None

Teleste MPX-E8 Encoder

Firmware Compatibility Matrix

| Unit Type | Firmware Version | Certification |
|----------------|------------------|---------------|
| Teleste MPX-8E | 4.3.12 | Certified |

Limitations

- Only unicast streaming is supported between the unit and Omnicast.
- Only MPEG4 stream supported.
- Uses only eight of the available 16 streams (the first two streams of each of the four DSP processing units).
- Video configuration restricted by the processing unit resource limitations, which are monitored by the unit configuration tool.

Known Issues

None

Addressed Issues

None

Omnicast Generic Extension Unit Limitations

- Software Motion Detection is supported for MJPEG units only.
- Audio is not supported.
- Software motion detection is disabled when using RTSP MJPEG streaming.
- Firmware upgrade is not supported.
- Input and output pins are not supported.
- Video attributes are not supported.
- Multi-stream is not supported.
- Video configuration is not supported.
- Serial ports are not supported.
- When using RTSP MJPEG streaming, the Omnicast motion detection feature is disabled.