



# **MGW Micro Premium**

## **Low-Latency Multi-Channel Compact H.264 Appliance**

### **User Manual**

**Version 1.0**

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Websites:

<http://www.vitecmm.com/>

<http://www.optibase.com/>

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# About This Manual

|  |   |
|--|---|
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## General

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## Manual Structure and Use

This manual is structured in a modular format, containing the following sections:

- [MGW Micro Premium Overview](#) (on page 3)  
Describes the MGW Micro Premium product, its system requirements and I/O specifications.
- [Getting Started](#) (on page 7)  
Describes how to connect to the appliance for the first time.
- [MGW Micro Premium Reset](#) (on page 14)  
Describes how to reset the appliance.
- [Setup and Operations](#) (on page 15)  
Describes how to set and configure MGW Micro Premium appliance, obtain an event log and upgrade software and firmware versions.
- [Playing MGW Micro Premium Video Streams](#) (see "[Playing Back MGW Micro Premium Video Streams](#)" on page 33)  
Describes how to set up players to view MGW Micro Premium channels playback.

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# MGW Micro Premium Overview

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|---|---|
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## The Product

MGW Micro Premium is an advanced industrial-grade, MPEG-4 H.264 portable encoding and streaming appliance. With TurboVideo™ technology, MGW Micro Premium Encoder is designed for low latency streaming of high-definition and standard-definition video sources across the enterprise, utilizing minimal bandwidth while preserving broadcast-quality video up to full HD 1080p60 resolution.

The streams can be viewed using Optibase's EZ TV or FITIS systems or with standard H.264 video players. Refer to [Playing Back MGW Micro Premium Video Streams](#) (on page 33).

### The MGW Micro Premium package includes:

- The MGW Micro Premium appliance
- Power supply
- Breakout cable for analog video and audio inputs
- CD containing the MGW Micro Premium User Manual and brochure.

### Optional parts (purchased separately):

- Metadata cable for insertion of real-time CoT (Cursor-On-Target) data over serial
- Mounting rack for mounting up to two MGW Micro Premium appliances in a single rack row
- 4x rubber feet for the MGW Micro Premium appliance (screw into the bottom mounting holes).

## System Requirements

### Operating System:

- Microsoft ® Windows XP ®
- Microsoft ® Windows Vista ®
- Microsoft ® Windows 2003 ® (32-bit and 64-bit)
- Microsoft ® Windows 2008 ® (32-bit and 64-bit)
- Microsoft ® Windows 7 ® (32-bit and 64-bit)
- Apple ® MAC OS ® 10.6 or higher

### Internet Browser:

- Internet Explorer 7 ®
- Internet Explorer 8 ®
- Internet Explorer 9 ®
- FireFox 3.6 ® or higher (windows and Mac)
- Safari 4 ® or higher (Mac)
- Google Chrome ™

## License and Upgrade

### MGW Micro Premium Software Licensing

The following two MGW Micro Premium licenses are available for the MGW Micro Premium Encoder:

- SD license- provides Standard Definition encoding capabilities
- HD license - provides both Standard and High definition encoding capabilities.

Refer to [The General Page](#) (on page 30) section for instructions for upgrading MGW Micro Premium license.

### MGW Micro Premium Firmware

Vitec and Optibase periodically release new firmware versions that include critical updates as well as feature enhancements. Refer to [The General Page](#) (on page 30) section for instructions for upgrading MGW Micro Premium firmware.

## I/O Specifications

### MGW Micro Premium Front Panel



| LED/ Port           | LED Status     | Description   |
|---------------------|----------------|---|
| <b>Stream LED</b>   | Off            | No stream   |
|                     | Green          | Streaming   |
| <b>Video in LED</b> | Off            | No video input  |
|                     | Green          | Video input exists  |
| <b>Power LED</b>    | Off            | The appliance is off.   |
|                     | Green          | The appliance is up and ready.                                |
|                     | Blinking green | The appliance is starting.                                    |
| <b>Error LED</b>    | Off            | All services are running.                                     |
|                     | Red            | When error occurred in one service or more the LED turns red. |
| <b>USB port</b>     |                | USB connection (factory use only).                            |

## MGW Micro Premium Rear Panel



**NOTE:**  
KLV serial cable must be purchased separately.

| Connector Label           | Connectors                | Description  |
|---------------------------|---------------------------|--|
| <b>STRM</b>               | RJ-45                     | Gigabit Ethernet for streaming (primary) and management (secondary).                                       |
| <b>MGMT</b>               | RJ-45                     | 100 Base-T Ethernet for management (currently not in use).   |
| <b>RESET</b>              |                           | Short press will restart the appliance. Long press (3 seconds) will cause return unit to factory settings. |
| <b>POWER +12V</b>         |                           | Power input.   |
| <b>AUDIO</b>              | Mini jack                 | Mini jack audio connection.  |
| <b>DVI-I</b>              |                           | DVI-I/A/D input.   |
| <b>HDMI</b>               |                           | HDMI input.  |
| <b>HD/SD-SDI 1/2</b>      | BNC                       | 3G/SDI input (SD and HD).  |
| <b>ANALOG VIDEO/AUDIO</b> | Micro DB25 breakout cable | Four channel-connector: composite/S-video and unbalanced stereo audio per channel                          |
| <b>SERIAL-1/2</b>         | Micro DB9                 | Connecting RS-232 input for ingesting metadata.  |

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# Getting Started

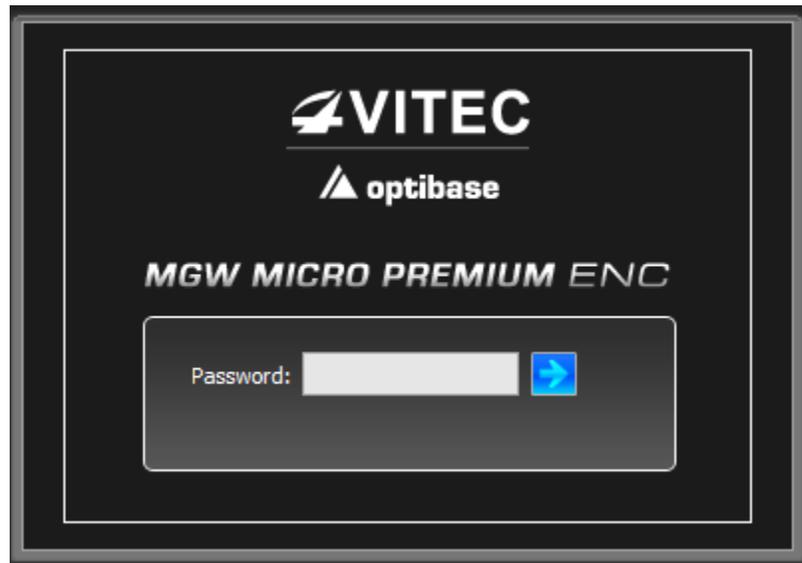
|                                    |    |
|------------------------------------|----|
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## Logging on

MGW Micro premium requires a password to logging on.

***To log on to MGW Micro Premium:***

1. Invoke the MGW Micro Premium application by entering in your browser's URL field either the default appliance's IP address or the new one you have set. The login window appears.



**Figure 3-1 :The Login window**

2. Type the password (the default password is "**1qaz!QAZ**") and click the blue arrow. The MGW Micro Premium interface is loaded.

## Initial Connection and Setup

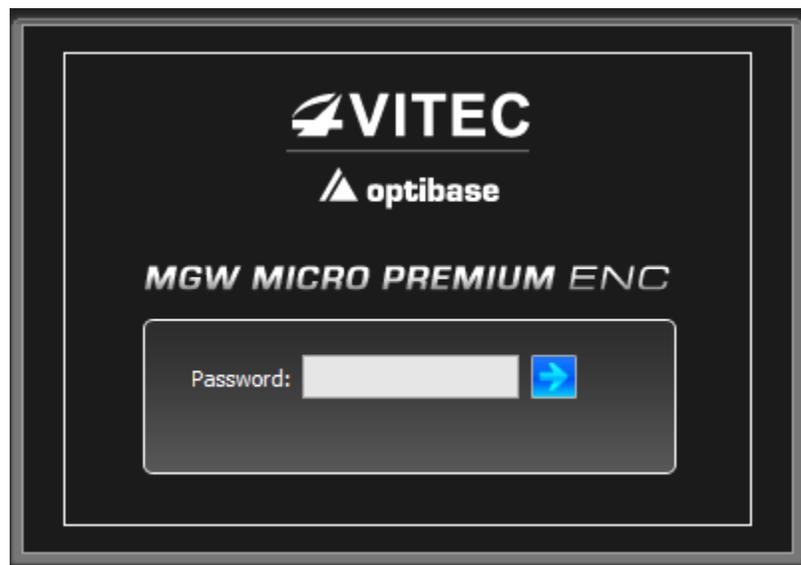
The MGW Micro Premium is configured, by default, to use a fixed static IP address for its streaming port (labeled "STRM"). Use the default **192.168.1.1** IP address to perform initial login from a computer connected directly to the platform.

***To configure the appliance's network settings for the first time:***

1. Connect a power source to the rear power input port.
2. Connect the network port labeled "STRM" to a computer in the **192.168.1.x** range with subnet **255.255.255.0** and ensure you can ping the default IP address of the unit to **192.168.1.1**.
3. Either use Internet Explorer browser or open a Telnet terminal.

***To configure the appliance's network settings for the first time through the browser:***

1. Type the appliance's IP address in the URL field. The login window appears.



**Figure 3-2 :The Login window**

2. Type the password (the default password is "**1qaz!QAZ**") and click the blue arrow. The MGW Micro Premium interface is loaded.

3. From the main menu select **System**. The system page opens.

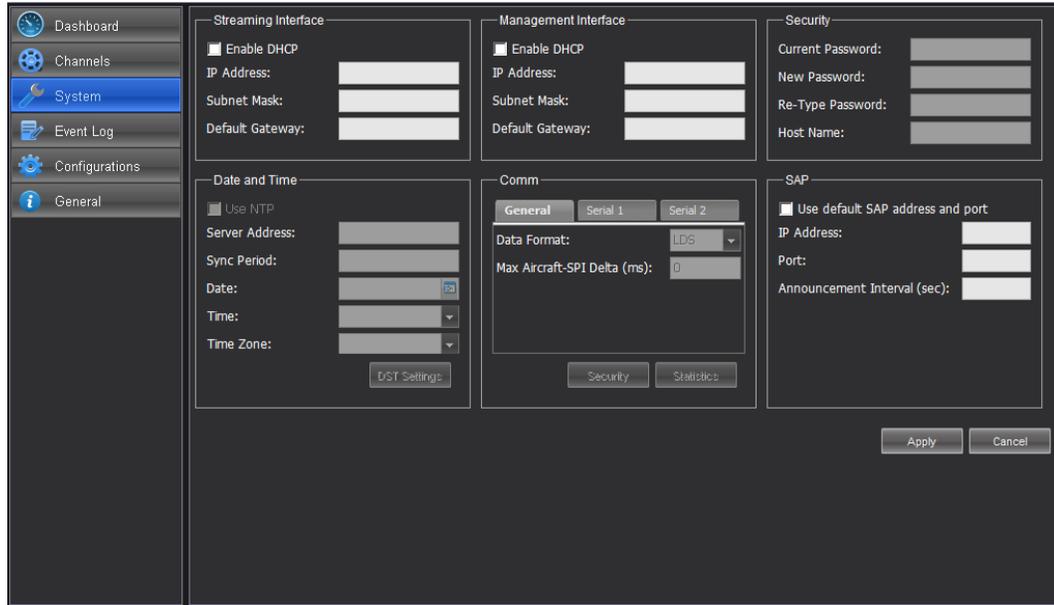


Figure 3-3 :The System page

4. Set the following parameters and click **Apply**.



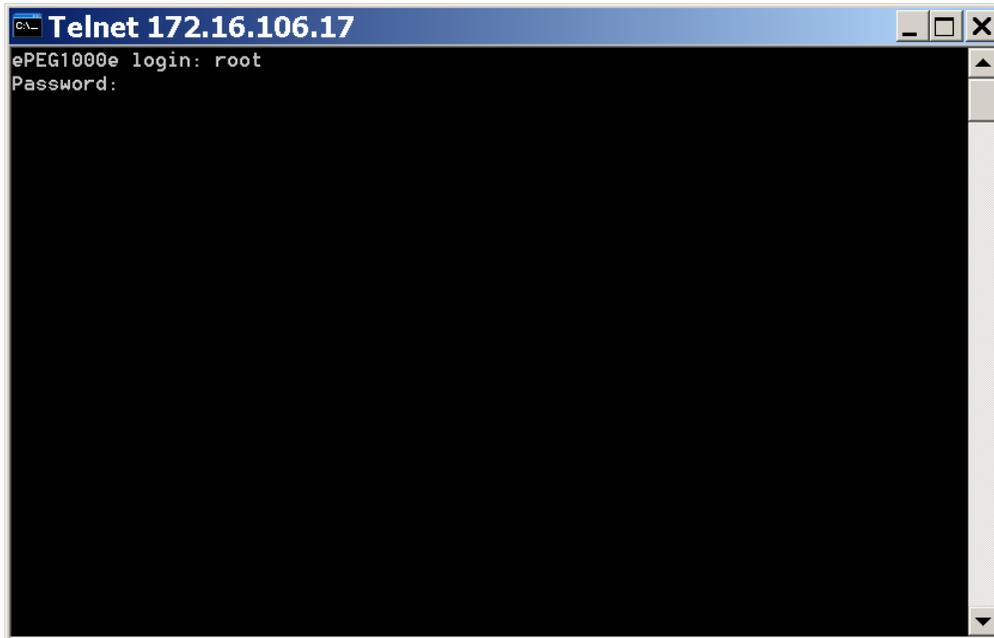
**CAUTION:**

When you change the appliance's IP address to a different subnet you may need to reconfigure your computer network settings to re-connect to the appliance.

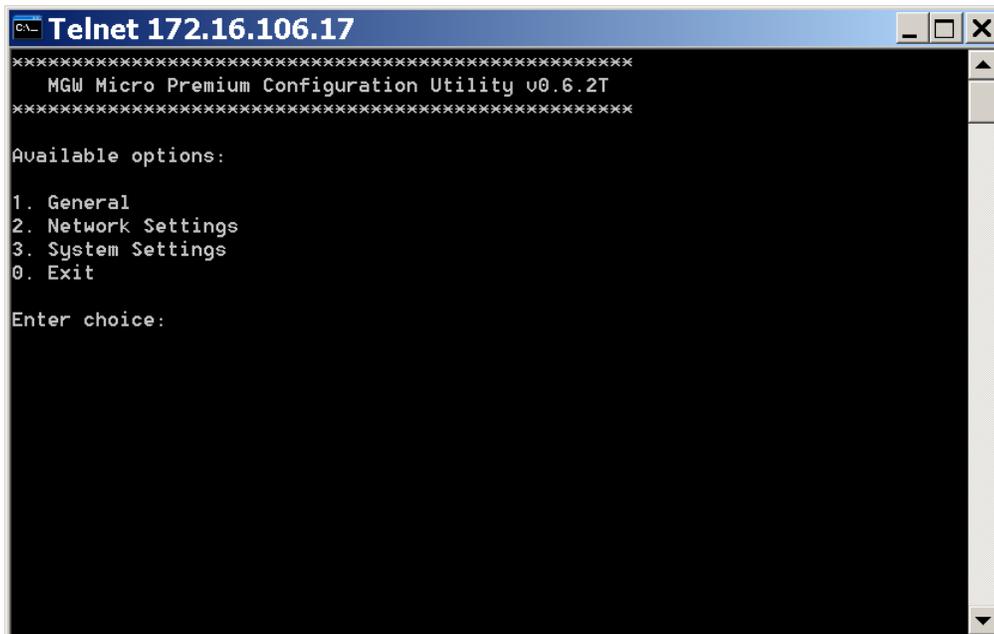
| Parameter              | Description                          |
|------------------------|--------------------------------------|
| <b>Enable DHCP</b>     | Select the check box to enable DHCP. |
| <b>IP Address</b>      | Enter static IP address.             |
| <b>Subnet Mask</b>     | Enter the subnet mask address.       |
| <b>Default Gateway</b> | Enter the default gateway address.   |

*To configure the appliance's network settings for the first time using Telnet:*

1. Open a Telnet terminal.
2. Connect to the MGW Micro Premium IP address.
3. At the login prompt type **"root"** and at the password prompt type **"1qaz!QAZ"**.



The main menu appears:





7. When done, follow Telnet "Exit" instructions on screen and close the Telnet window to save the settings.



**CAUTION:**

If you have changed the appliance's IP address to a different subnet you may need to reconfigure your computer network settings to re-connect to the appliance.

## Rack Mounting

You are provided with the option to mount MGW Micro Premium. To mount the appliance, order separately the designated mounting part from Optibase.



**Figure 3-4 :MGW Micro Premium Mounting Rack**



**NOTE:**

- The mounting part can host two MGW Micro premium appliances side by side.
- The mounting part is 1-RU high.

### ***To mount the MGW Micro Premium appliance:***

1. Secure the racking bar to the rack.
2. Unscrew the two inner screws from the front panel of the micro premium.
3. Position the micro premium behind one of the mounting slots and align the appliance's mounting holes with the holes on the racking bar.
4. Use the screws extracted from the appliance to secure the appliance to the racking bar.

## MGW Micro Premium Reset

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### Resetting MGW Micro Premium Settings

The appliance can be reset in one of the following ways:

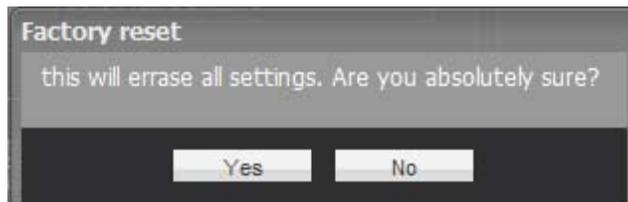
- Hardware reset.
- Software reset.

***To reset the MGW Micro Premium (Hardware):***

1. On the MGW Micro Premium rear panel press the **RESET** button. Short press will restart the appliance, long press (3 seconds) will cause return unit to factory settings.

***To reset the MGW Micro Premium (through the application):***

1. In the **General** page, click **Factory Reset** to reset all values to default factory values.



2. Click **Yes**.

# Setup and Operations

|   |    |
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## Using the MGW Micro Premium Interface

### MGW Micro Premium Functions

The followings are available at all times (regardless which menu item is selected):

1. **Dashboard frame** - top of page from which channels are controlled and monitored.
2. **Encoding Mode** - allows you to set the encoding mode.
3. **Logout** - allows you to log out the application.
4. **About** - provides information about MGW Micro Premium.

### The Main Menu

The MGW Micro Premium main menu includes the following items:

**Dashboard** - view platform, network and traffic information.

- **Channels** - view and set the following channel parameters: source, processing and target.
- **System** - view and set appliance's parameters such as date and time, network, communication etc.
- **Event Log** - filtered view of channel's related events.
- **Configurations** - allows saving of channel configurations.
- **General** - view system information such as software version, licensing and provides restart, firmware and license upgrade functions.



**NOTE:**  
To accept changes you must click Apply. If you don't click Apply and you click another move to one of the other menu items: Dashboard, Channels, System etc., the following warning appears:

**There are unsaved changes** ✕

All unsaved changes will be lost. Are you sure you want to proceed?

**VITEC** **optibase MGW MICRO PREMIUM ENC** Encoding Mode: TurboVideo™ | About | Logout

| Num | Channel Name | Source   | Total Bit-Rate | Resolution      | Status  | Control | KLV | Target Address | Target Port |
|-----|--------------|----------|----------------|-----------------|---------|---------|-----|----------------|-------------|
| 1   | Channel X    | HD-SDI 1 | 0              | 1920x1080i59.94 | Stopped |         |     | 225.1.1.1      | 30120       |
| 2   | Channel 1    | HD-SDI 1 | 7192000        | 1280x720p60     | Playing |         |     | 225.1.1.1      | 30120       |
| 3   | Channel X    | HD-SDI 1 | 0              | 1920x1080i59.94 | Stopped |         |     | 225.1.1.1      | 30120       |
| 4   | Channel X    | HD-SDI 1 | 0              | 1920x1080i59.94 | Stopped |         |     | 225.1.1.1      | 30120       |
| 5   | Channel X    | HD-SDI 1 | 0              | 1920x1080i59.94 | Stopped |         |     | 225.1.1.1      | 30120       |

**Dashboard**

- Channels
- System
- Event Log
- Configurations
- General

**Streaming Interface**

IP Address:

Subnet Mask:

Default Gateway:

**Management Interface**

IP Address:

Subnet Mask:

Default Gateway:

**Traffic Summary**

Outgoing Streams (Mbps):

Serial 1 TX:  RX:

Serial 2 TX:  RX:

**Rear Panel Connectors**

**System Information**

Temperature:  Up Time:  Date/Time:  NTP:

Figure 5-1 :MGW Micro Premium Main page

## Dashboard Frame

In the dashboard frame section you set the encoding mode and control the channel playback.

| Num | Channel Name | Source   | Total Bit-Rate | Resolution      | Status  | Control | KLV | Target Address | Target Port |
|-----|--------------|----------|----------------|-----------------|---------|---------|-----|----------------|-------------|
| 1   | Channel X    | HD-SDI 1 | 0              | 1920x1080i59.94 | Stopped |         |     | 225.1.1.1      | 30120       |
| 2   | stream_0     | HD-SDI 1 | 6192000        | 1920x1080i59.94 | ERROR   |         | ✓   | 225.1.1.1      | 30120       |
| 3   | Channel X    | HD-SDI 1 | 0              | 1920x1080i59.94 | Stopped |         |     | 225.1.1.1      | 30120       |
| 4   | Channel X    | HD-SDI 1 | 0              | 1920x1080i59.94 | Stopped |         |     | 225.1.1.1      | 30120       |
| 5   | Channel X    | HD-SDI 1 | 0              | 1920x1080i59.94 | Stopped |         |     | 225.1.1.1      | 30120       |

Figure 5-2 :The Dashboard Frame

### To set the encoding mode:

1. From the **Encoding Mode** drop-down list select one of the following modes:

| Mode                | Description  |
|---------------------|--|
| <b>Broadcast</b>    | Single SD/HD channel, highest Video quality, up to 1080p60, standard latency.  |
| <b>Low Latency</b>  | Single SD/HD channel, low Latency, up to 1080i60.                              |
| <b>Turbo Video</b>  | Single SD/HD channel, ultra low Latency, up to 1080i60.                        |
| <b>Multi-Stream</b> | Up to four SD/HD channels, Low Latency, up to Standard Definition NTSC or PAL. |

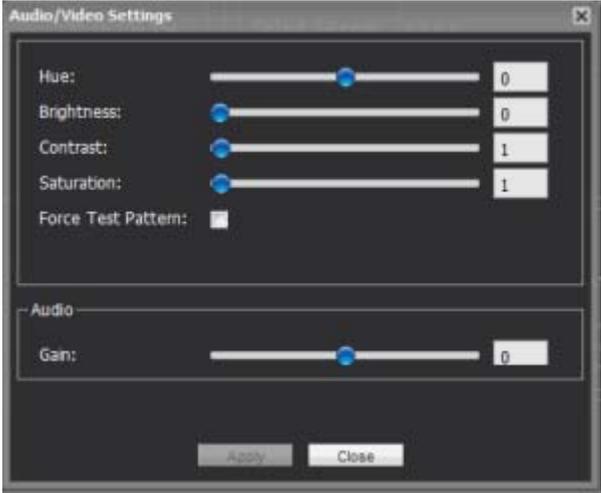


**NOTE:**

You can change encoding mode only when all channels are in a "stopped" state.

The appliance saves the current encoding mode configuration and the Dashboard display changes accordingly.

| Parameter           | Display | Description  |
|---------------------|---------|--|
| <b>Num</b>          | 1-5     | Displays the channel number (Static location).                   |
| <b>Channel Name</b> |         | Display the channel name as set by the Administrator.            |
| <b>Source</b>       |         | Displays the source type assigned to the channel.                |
| <b>Bit-Rate</b>     |         | Display the total bit-rate of the channel (Video+Audio+overhead) |
| <b>Resolution</b>   |         | Displays the video resolution.                                   |

|                       |  |  |
|-----------------------|--|--|
| <b>Status</b>         | <ul style="list-style-type: none"> <li>• Playing</li> <li>• Stopped</li> <li>• Error</li> </ul>  | <p>Displays the status of the channel.</p> <p>Hovering over an "Error" state brings up a tool tip with description of the error.</p>   |
| <b>Control</b>        | <ul style="list-style-type: none"> <li> Play/Stop</li> <li> A/V Settings</li> <li> Event Log</li> </ul> | <p>Displays the channel status and allows you to change it as well as view events related to the channel.</p> <p>The following are three channel's states:</p> <ul style="list-style-type: none"> <li>• <b>Stopped – Orange.</b> The settings for this channel are configured but the channel has not been activated by the user.</li> <li>• <b>Playing – Green.</b> The channel is encoding and streaming without any known errors.</li> <li>• <b>Error – Red.</b> The channel has encountered an error. This state applies ONLY to channels that were started by the user.</li> </ul> <p><b>A/V Settings</b> - Brings up a window in which the following Audio/Video parameters can be set on-the-fly: <b>Hue, Brightness, Contrast, Saturation, Force Test Pattern</b> and <b>Audio Gain</b>.</p>  <p><b>Event Log</b> - displays an event log for the selected channel.</p> |
| <b>KLV</b>            |  | <p>Indicates if KLV metadata is being inserted into the stream (enabled or disabled).</p>  |
| <b>Target Address</b> | <ul style="list-style-type: none"> <li>• Multicast IP</li> <li>• Unicast IP</li> </ul>   | <p>Displays the target IP address.</p>   |
| <b>Target Port</b>    |  | <p>Displays the port number of the target.</p>   |

## The Dashboard Page

The **Dashboard** page is the main page displaying the appliance's view and displays network information for both management and stream interfaces as well as overall traffic summary.

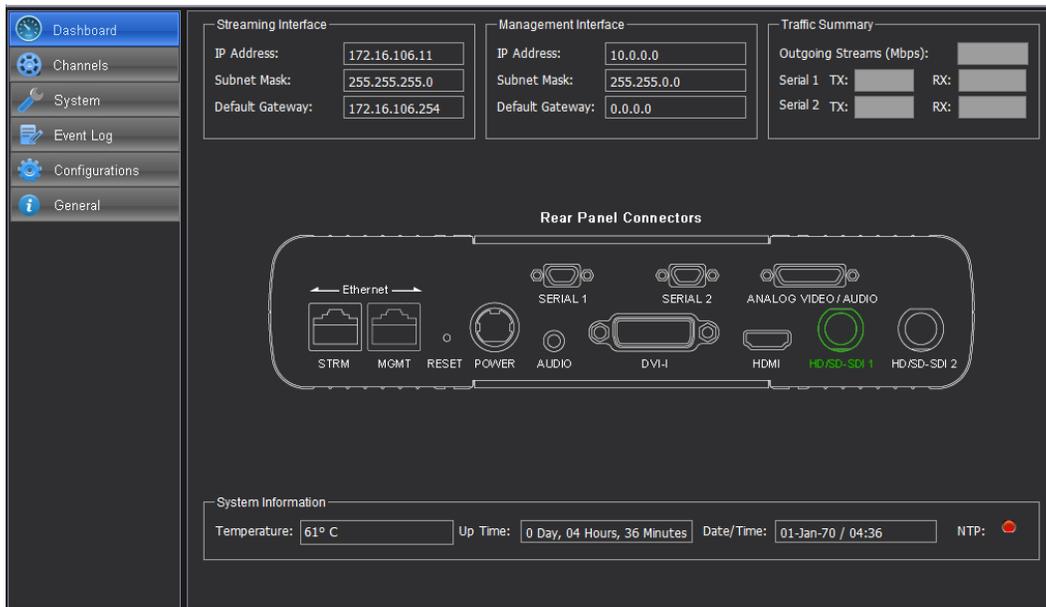
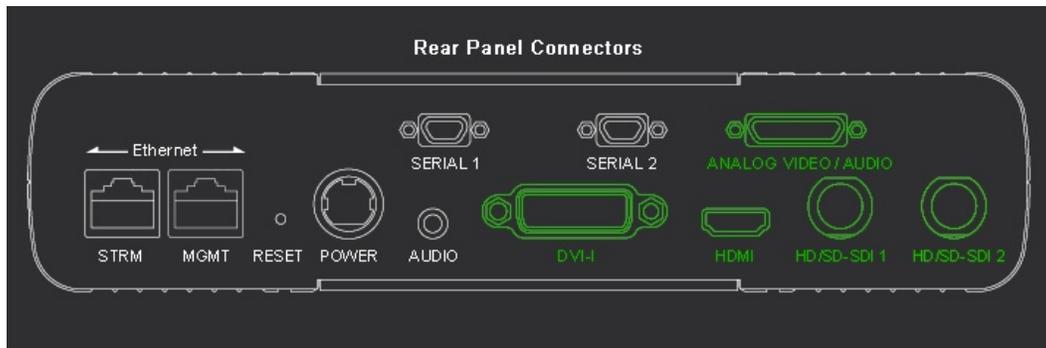


Figure 5-3 :The Dashboard page

Interfaces with valid input source appear in green (see figure below).



*To view the dashboard parameters:*

1. From the main menu select **Dashboard**. The following parameters are displayed:

| Section                      | Description   |
|------------------------------|---|
| <b>Streaming Interface</b>   | <p>IP Address – Display the "streaming" NIC IP address.</p> <p>Subnet Mask – Display the "streaming" NIC subnet mask address.</p> <p>Default Gateway – Display the "streaming" NIC Default Gateway address.</p>   |
| <b>Management Interface</b>  | <p>IP Address – Display the "management" NIC IP address.</p> <p>Subnet Mask – Display the "management" NIC subnet mask address.</p> <p>Default Gateway – Display the "management" NIC Default Gateway address.</p>  |
| <b>Traffic Summary</b>       | <p>Outgoing Streams – Actual stream BW from both NIC's.</p> <p>Serial 1 TX – Bytes transmitted from the serial 1 port. (KLV - Live)</p> <p>Serial 1 RX - Bytes received from the serial 1 port. (CoT - Live)</p> <p>Serial 2 TX – Bytes transmitted from the serial 2 port. (KLV - Live)</p> <p>Serial 2 RX - Bytes received from the serial 2 port. (CoT - Live)</p>   |
| <b>Rear Panel Connectors</b> | <p>Displays the source inputs of the platform. Indication of the source current connection state is as follows:</p> <p>Green – connected</p> <p>White – not connected.</p>  |
| <b>System Information</b>    | <ul style="list-style-type: none"> <li>• <b>Temperature</b> – Displays the platform's internal temperature in Celsius. The value turns to red when out-of range.</li> <li>• <b>Up Time</b> – Display the time since last boot.</li> <li>• <b>Date/Time</b> – Display the platform date and time.</li> <li>• <b>NTP</b> – An indication LED for status of network time server. <ul style="list-style-type: none"> <li>Green - Synchronizing with NTP server.</li> <li>Red - Not synchronizing with NTP server or the NTP server is unreachable.</li> </ul> </li> </ul> |

## The Channels Page

In the **Channels** page you set the parameters of the following sections:

**Source** - where you assign the source to use for the particular channel.

**Processing** - where you set encoding parameters for the particular channel.

**Target** - where you set the parameters of the output stream.

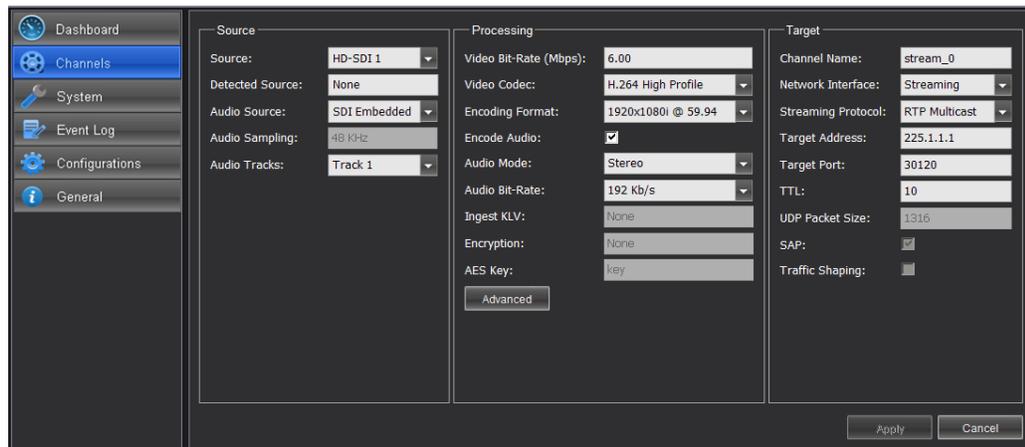


Figure 5-4 :The Channels page

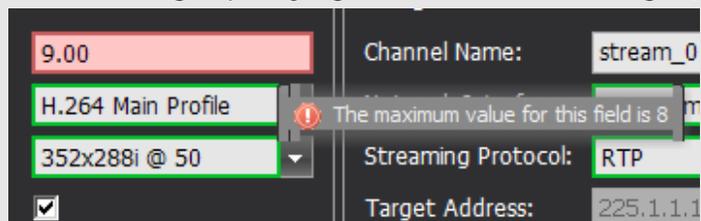
### *To set the channels parameters:*

1. From the main menu select **Channels**.
2. Set the following parameters as required in each section and click **Apply**.



#### NOTE:

- Options available for selection may vary according to selected (active) encoding mode, input in use and processing parameters.
- A green frame appears when entered value is valid (see figure below).
- A red frame appears when the entered value is not valid accompanied with a message specifying the valid value or range (see figure below).



## Source Section

| Parameter              | Description                         |
|------------------------|-------------------------------------|
| <b>Source</b>          | Select the appropriate source.      |
| <b>Detected Source</b> | Displays the detected video format. |
| <b>Audio Source</b>    | Select the audio source.            |
| <b>Audio Sampling</b>  | Select the audio sampling rate.     |
| <b>Audio Tracks</b>    | Select the audio track to process.  |

## Processing Section

| Parameter              | Description  |
|------------------------|--|
| <b>Video Bit-Rate</b>  | Enter the video bitrate in Kbps.   |
| <b>Video Codec</b>     | Select the video codec.  |
| <b>Encoding Format</b> | Select the video encoding format.  |
| <b>Encode Audio</b>    | Select the check box to activate audio encoding.   |
| <b>Audio Mode</b>      | Select the audio encoding mode.  |
| <b>Audio Bit-Rate</b>  | Select the audio encoding bitrate.   |
| <b>Ingest KLV</b>      | Select to ingest metadata and embed as KLV<br>Not available in "TurboVideo™" encoding mode.  |
| <b>Encryption</b>      | Select the encryption mode. <ul style="list-style-type: none"> <li>When the "Encryption" is "None", the function "AES Key" is not available.</li> </ul>  |
| <b>AES Key</b>         | Displays the AES key (16 / 32 character string according to the selected Encryption mode). <ul style="list-style-type: none"> <li>When "Encryption" check box selected, Random key generator fills the text box. (Admin could delete/edit the generated string)</li> <li>When the "Encryption" is "None", this function is not available.</li> </ul> Not available in "TurboVideo™" encoding mode. |
| <b>Advanced</b>        | Click this button to set advanced processing parameters as follows:<br>Aspect Ratio – 4:3 / 16:9<br>Frame Rate – Full / 3/4 / 2/3 / 1/2 / 1/3 / 1/4 (not available in "Broadcast" encoding mode)<br>VLC Mode – Select variable length coding mode CABAC / CVLAC .<br>Video PID – Default: 1241<br>Audio PID – Default: 1242<br>KLV PID – Default: 497  |

PCR PID – Default: 1241  
PMT PID – Default: 1240  
Program Number – Default: 1  
GOP Size – 1-1000 (Not available in "Broadcast" mode.  
Closed GOPs –Select the check box to enable it.  
Timestamp GOP – Select the check box to enable it.

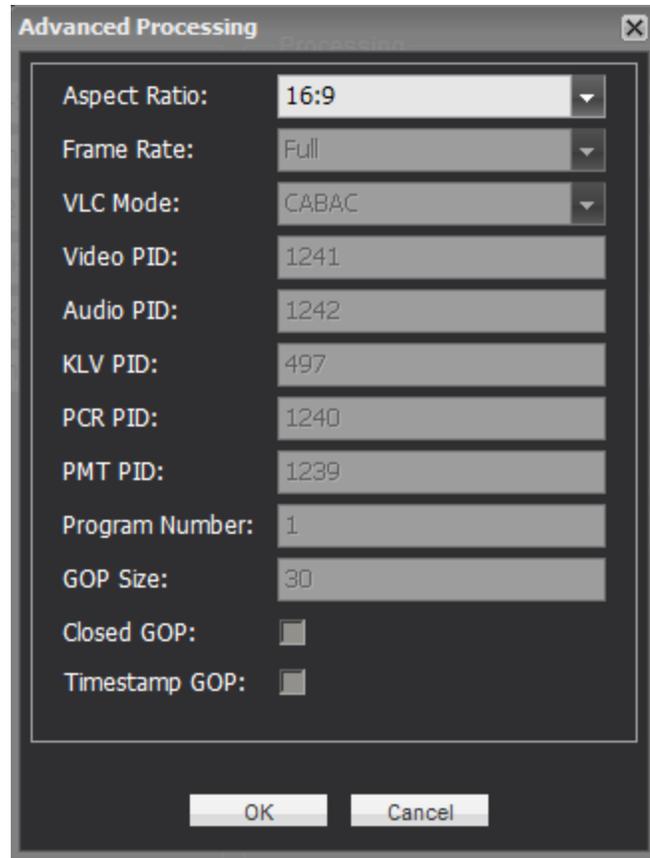


Figure 5-5 :The Advanced Processing window

## Target Section

| Parameter                 | Description   |
|---------------------------|---|
| <b>Channel Name</b>       | Enter the channel name. This name will also appear in Session Announcement Protocol (SAP) messages.   |
| <b>Network Interface</b>  | Select the network interface to stream from.  |
| <b>Streaming Protocol</b> | Select the streaming protocol.  |
| <b>Target Address</b>     | Select the target IP address.   |
| <b>Target port</b>        | Select the target port.   |
| <b>TTL</b>                | Enter the TTL value.  |
| <b>UDP Packet Size</b>    | Enter the UDP packet size.  |
| <b>SAP</b>                | Select the SAP check box to enable Session Announcement Protocol.   |
| <b>Traffic Shaping</b>    | Select the Traffic Shaping check box to enable network smoothing. <ul style="list-style-type: none"> <li>• Not available in "Turbo Video™" mode.</li> </ul> |



**NOTE:**  
You must click **Apply** for the new settings to be saved.



**CAUTION:**  
When video source is lost or different format is selected while the channel is playing a color bar is displayed. In such case verify the following:

- Source is connected
- The video frame rate and/or resolution match the one selected for the channel.

## The System Page

In the **System** page you set the parameters of the following sections:

- **Streaming Interface**
- **Management Interface**
- **Password**
- **Date and Time**
- **Comm**
- **SAP**

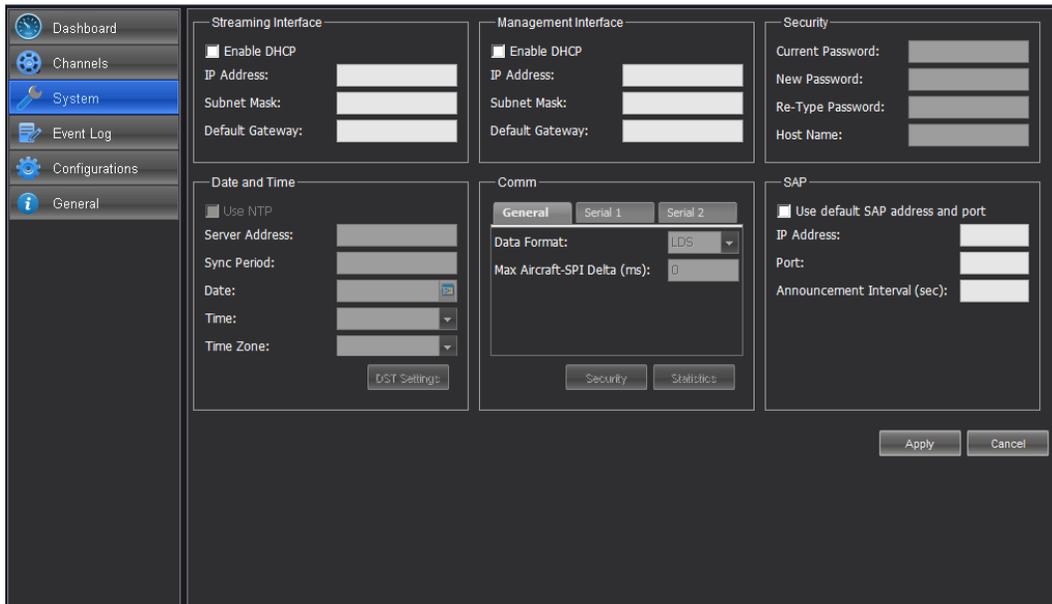


Figure 5-6 :The System page

***To set the system parameters:***

1. From the main menu select **System**.
2. Set the desired parameters as required in each section and click **Apply**.

***To set the Streaming and Management Interfaces:***

| Parameter              | Description                          |
|------------------------|--------------------------------------|
| <b>Enable DHCP</b>     | Select the check box to enable DHCP. |
| <b>IP Address</b>      | Enter static IP address.             |
| <b>Subnet Mask</b>     | Enter the subnet mask address.       |
| <b>Default Gateway</b> | Enter the default gateway address.   |

*To set the Password:*

| Parameter               | Description   |
|-------------------------|---|
| <b>Current Password</b> | Type the current password.  |
| <b>New Password</b>     | Type the new password (8-14 characters).  |
| <b>Re-Type Password</b> | Re-type the new password.   |
| <b>Host Name</b>        | Type the host name as follows: <host name>.<br>The default is <b>MGWMP&lt;xxxx&gt;</b> (where the last four digits are the platform serial number). |

*To set Date and Time:*

| Parameter             | Description   |
|-----------------------|---|
| <b>Use NTP</b>        | Select the check box to enable synchronization with the NTP server.   |
| <b>Server Address</b> | Type the NTP server address.  |
| <b>Sync Period</b>    | Type the synchronization period.                                      |
| <b>Date</b>           | Set the date.   |
| <b>Time</b>           | Set the time.   |
| <b>Time Zone</b>      | Set the time zone.  |
| <b>DST Settings</b>   | Click this button to set the start date and time for Daylight Saving. |

*To set communication (Comm):*

1. In **General** tab set the **Data Format** and the **Max Aircraft-SPI Delta (ms)**.
2. In the **Serial 1** and **serial 2** tabs set the following parameters:

| Parameter           | Description                        |
|---------------------|------------------------------------|
| <b>Baud Rate</b>    | Select the check box to enable it. |
| <b>Data Bits</b>    | Select the data bits.              |
| <b>Parity</b>       | Select the parity.                 |
| <b>Stop Bits</b>    | Select the stop bits.              |
| <b>Flow Control</b> | Select the flow control.           |

**To set SAP:**

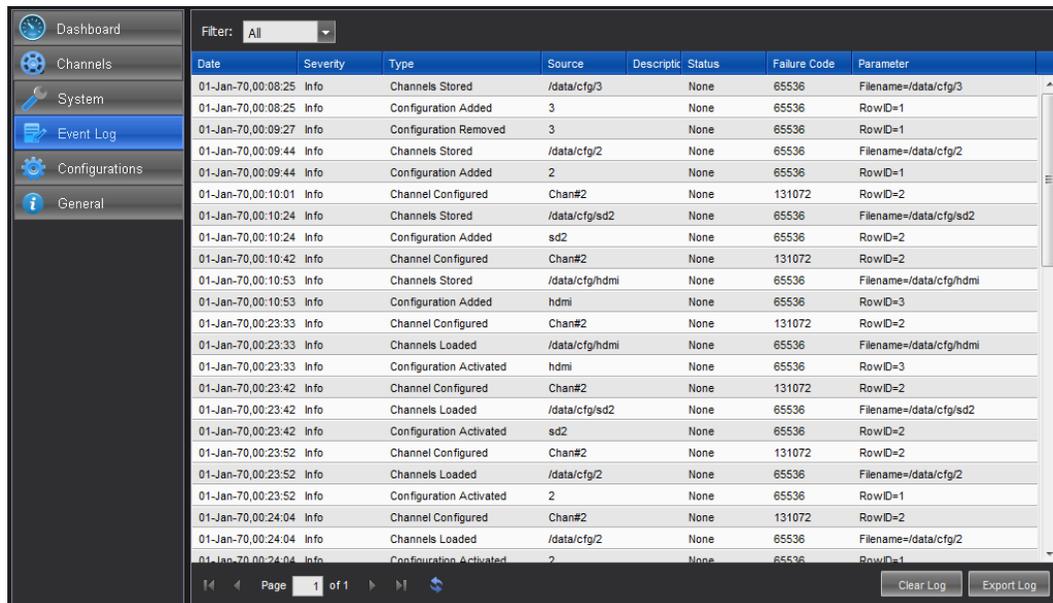
| Parameter                                | Description   |
|--|---|
| <b>User default SAP address and port</b> | Use the default Session Announcement Protocol multicast group and port as per RFC 2974. |
| <b>IP Address</b>                        | Set the target multicast IP address to which SAP messages will be sent.                 |
| <b>Port</b>                              | Set the target port to which SAP messages will be sent.                                 |
| <b>Announcement Interval (sec)</b>       | Set the interval between SAP messages.  |



**NOTE:**  
You must click **Apply** for the new settings to be saved.

## The Event Log Page

In the **Event Log** page you can view the log of events and export them.

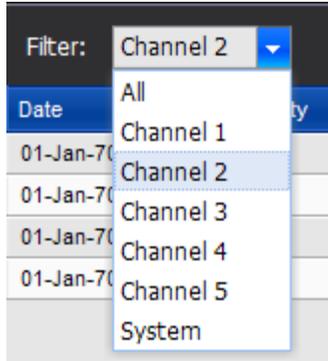


| Date               | Severity | Type                    | Source         | Descripti | Status | Failure Code | Parameter               |
|--------------------|----------|-------------------------|----------------|-----------|--------|--------------|-------------------------|
| 01-Jan-70,00:08:25 | Info     | Channels Stored         | /data/cfg/3    |           | None   | 65536        | Filename=/data/cfg/3    |
| 01-Jan-70,00:08:25 | Info     | Configuration Added     | 3              |           | None   | 65536        | RowID=1                 |
| 01-Jan-70,00:09:27 | Info     | Configuration Removed   | 3              |           | None   | 65536        | RowID=1                 |
| 01-Jan-70,00:09:44 | Info     | Channels Stored         | /data/cfg/2    |           | None   | 65536        | Filename=/data/cfg/2    |
| 01-Jan-70,00:09:44 | Info     | Configuration Added     | 2              |           | None   | 65536        | RowID=1                 |
| 01-Jan-70,00:10:01 | Info     | Channel Configured      | Chan#2         |           | None   | 131072       | RowID=2                 |
| 01-Jan-70,00:10:24 | Info     | Channels Stored         | /data/cfg/sd2  |           | None   | 65536        | Filename=/data/cfg/sd2  |
| 01-Jan-70,00:10:24 | Info     | Configuration Added     | sd2            |           | None   | 65536        | RowID=2                 |
| 01-Jan-70,00:10:42 | Info     | Channel Configured      | Chan#2         |           | None   | 131072       | RowID=2                 |
| 01-Jan-70,00:10:53 | Info     | Channels Stored         | /data/cfg/hdmi |           | None   | 65536        | Filename=/data/cfg/hdmi |
| 01-Jan-70,00:10:53 | Info     | Configuration Added     | hdmi           |           | None   | 65536        | RowID=3                 |
| 01-Jan-70,00:23:33 | Info     | Channel Configured      | Chan#2         |           | None   | 131072       | RowID=2                 |
| 01-Jan-70,00:23:33 | Info     | Channels Loaded         | /data/cfg/hdmi |           | None   | 65536        | Filename=/data/cfg/hdmi |
| 01-Jan-70,00:23:33 | Info     | Configuration Activated | hdmi           |           | None   | 65536        | RowID=3                 |
| 01-Jan-70,00:23:42 | Info     | Channel Configured      | Chan#2         |           | None   | 131072       | RowID=2                 |
| 01-Jan-70,00:23:42 | Info     | Channels Loaded         | /data/cfg/sd2  |           | None   | 65536        | Filename=/data/cfg/sd2  |
| 01-Jan-70,00:23:42 | Info     | Configuration Activated | sd2            |           | None   | 65536        | RowID=2                 |
| 01-Jan-70,00:23:52 | Info     | Channel Configured      | Chan#2         |           | None   | 131072       | RowID=2                 |
| 01-Jan-70,00:23:52 | Info     | Channels Loaded         | /data/cfg/2    |           | None   | 65536        | Filename=/data/cfg/2    |
| 01-Jan-70,00:23:52 | Info     | Configuration Activated | 2              |           | None   | 65536        | RowID=1                 |
| 01-Jan-70,00:24:04 | Info     | Channel Configured      | Chan#2         |           | None   | 131072       | RowID=2                 |
| 01-Jan-70,00:24:04 | Info     | Channels Loaded         | /data/cfg/2    |           | None   | 65536        | Filename=/data/cfg/2    |
| 01-Jan-70,00:24:04 | Info     | Configuration Activated | 2              |           | None   | 65536        | RowID=1                 |

Figure 5-7 :The Event Log page

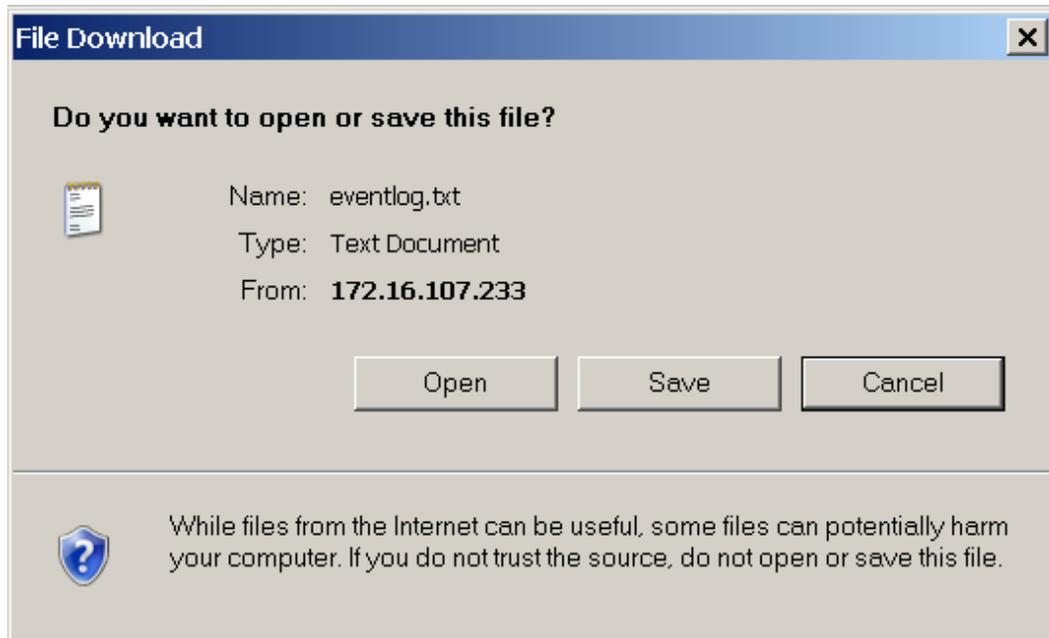
**To filter the view:**

1. From the **Filter** drop-down list select one of the following options:



**To export event log:**

1. Click **Export Log**. The **File Download** window appears.



**Figure 5-8 :The File Download window**

2. Click **Open** to open the log. The log file is opened with a common text editor (such as notepad)  
- Or -
3. Click **Save** to save the file.

## The Configurations Page

In the **Configuration** page you can add, activate, and delete channel configurations.

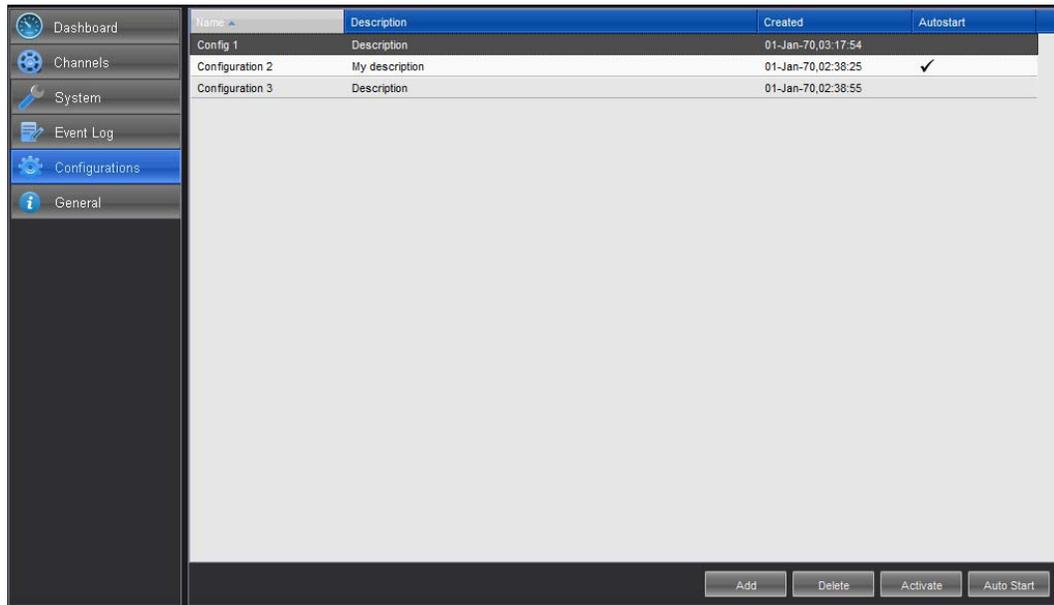


Figure 5-9 :The Configuration page

### *To add a configuration:*

1. Click **Add**.



2. Type the configuration name and description.
3. Click **Save**. The new configuration appears on the top row.

### *To activate a configuration:*

1. Select the desired configuration row.
2. Click **Activate** to activate the configuration. The activated configuration is applied.

### *To delete a configuration:*

1. Select the desired configuration row.
2. Click **Delete** to delete the configuration.

**To activate Auto Start:**

1. Select the desired configuration row.
2. Click **Auto Start**. The  icon appears in the Auto Start column in the relevant configuration row.  
The next time the appliance restarts, the selected configuration will load automatically.

## The General Page

In the **General** page you can view appliance related parameters and perform license and firmware upgrades.

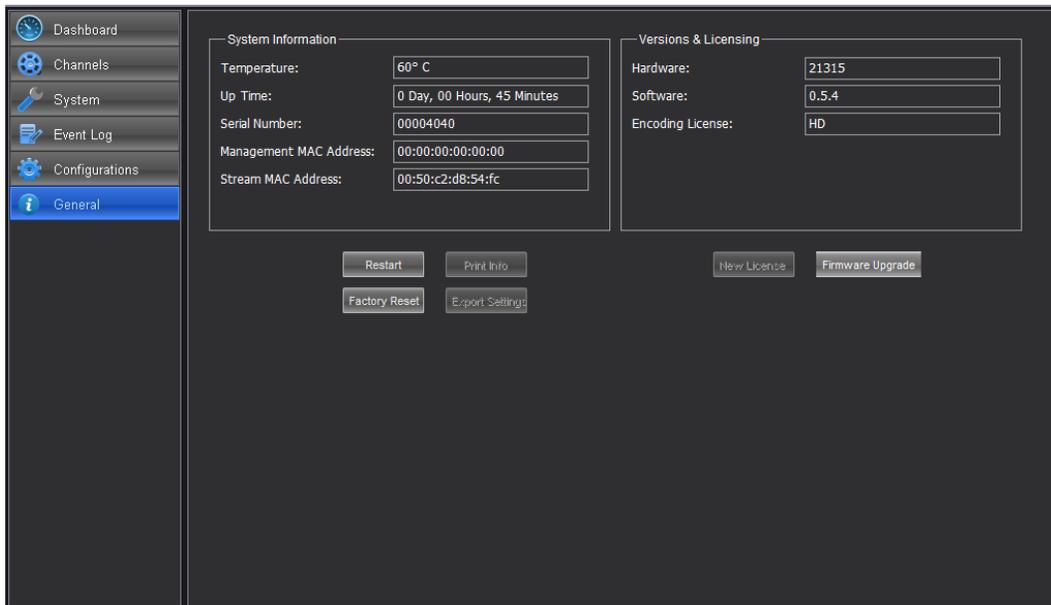


Figure 5-10 :The General page

**To view the System Information parameters:**

| Parameter                     | Description  |
|-------------------------------|--|
| <b>Temperature</b>            | Displays the internal temperature in Celsius of the appliance. |
| <b>Up Time</b>                | Displays the time since last restart.                          |
| <b>Serial Number</b>          | Displays the hardware serial number.                           |
| <b>Management MAC Address</b> | Displays the NIC management MAC Address.                       |
| <b>Stream MAC Address</b>     | Displays the NIC streaming MAC Address.                        |

*To view and set Version & Licensing:*

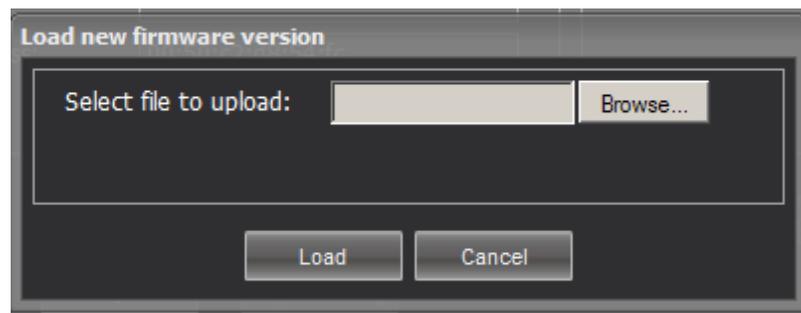
| Parameter               | Description   |
|-------------------------|---|
| <b>Hardware</b>         | Displays the current hardware revision.                 |
| <b>Software</b>         | Displays the active software version.                   |
| <b>Encoding License</b> | Displays HD or SD - depending on the purchased license. |

*To upgrade MGW Micro Premium license:*

1. Send Optibase your upgrade license request.
2. Upon receipt of the new license file (\*.lic file) click **New License**, select the new file and follow the on-screen instructions.

*To upgrade MGW Micro Premium Firmware version:*

1. Send Optibase your upgrade firmware request.
2. Upon receipt of the new firmware file (\*.tgz file) click **Firmware Upgrade**. The **Load new firmware version** window appears.

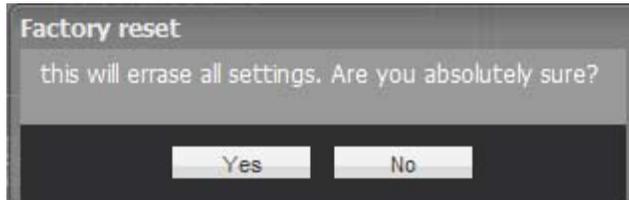


**Figure 5-11 :The Load New Firmware Upload window**

3. Click **Browse** to select the new firmware file and click **Load**. The new version is loaded.
4. Follow the on-screen instructions to complete the upload process.

## General Page Functions

- Click **Restart** to restart the appliance.
- Click **Factory Reset** to reset all values to default factory values.



- Click **Export Settings** to export channel configurations and save as a file for backup purposes or for importing into a different appliance.
- Click **Print Info** to obtain a printed summary of vital system information.

---

## Playing Back MGW Micro Premium Video Streams

The MGW Micro Premium uses ISO compliant MPEG-4 Part-10 (H.264) compression in both RTSP and MPEG-2 Transport stream over UDP encapsulation protocols. The MGW Micro Premium streams can be viewed using the following video players:

- Optibase EZ TV Player.
- Optibase FITIS Player.
- MGW Micro Premium Decoder
- Third-party software H.264 decoders such as VideoLan (VLC) Player.
- Third-party hardware H.264 decoders such as Amino AmiNet set-top-boxes
- Professional H.264 IRD's

**NOTE:**

Certain capabilities of MGW Micro Premium such as TurboVideo™ low latency streaming, AES encryption and MISB KLV metadata may not be supported by all third-party decoders. Please consult with Vitec and Optibase support for additional information about interoperability with third-party decoders.

**CAUTION:**

When video source is lost or different format is selected while the channel is playing a color bar is displayed. In such case verify the following:

- Source is connected
- The video frame rate and/or resolution match the one selected for the channel.

## Setting EZ TV as the Player

1. In EZ TV portal go to **Static Channels** and click **Add Channel**.



2. Enter the **Channel Name**.
3. Enter the **Channel Number**.
4. Select **RTSP** for **RTSP** or **Multicast** for **UDP** Transport Stream mode.
5. In the **IP** field enter the Micro IP Address.
6. In the **Port** field enter the port number.
7. Click **Publish**.



**NOTE:**

- The above steps are partial instructions. Refer to EZ TV Portal and EZ TV Player user manuals for detailed instructions.
- When SAP is enabled on one or more of Premium channels EZ TV will automatically discover the broadcasting and list these channels under Dynamic Channels in EZ TV Player.

8. From the EZ TV Player, select the appropriate channel. The MGW Micro Premium stream is played on EZ TV Player under Static Channels.

## Setting FITIS as the Player

Setting FITIS as the player is done in a similar manner as in EZ TV.

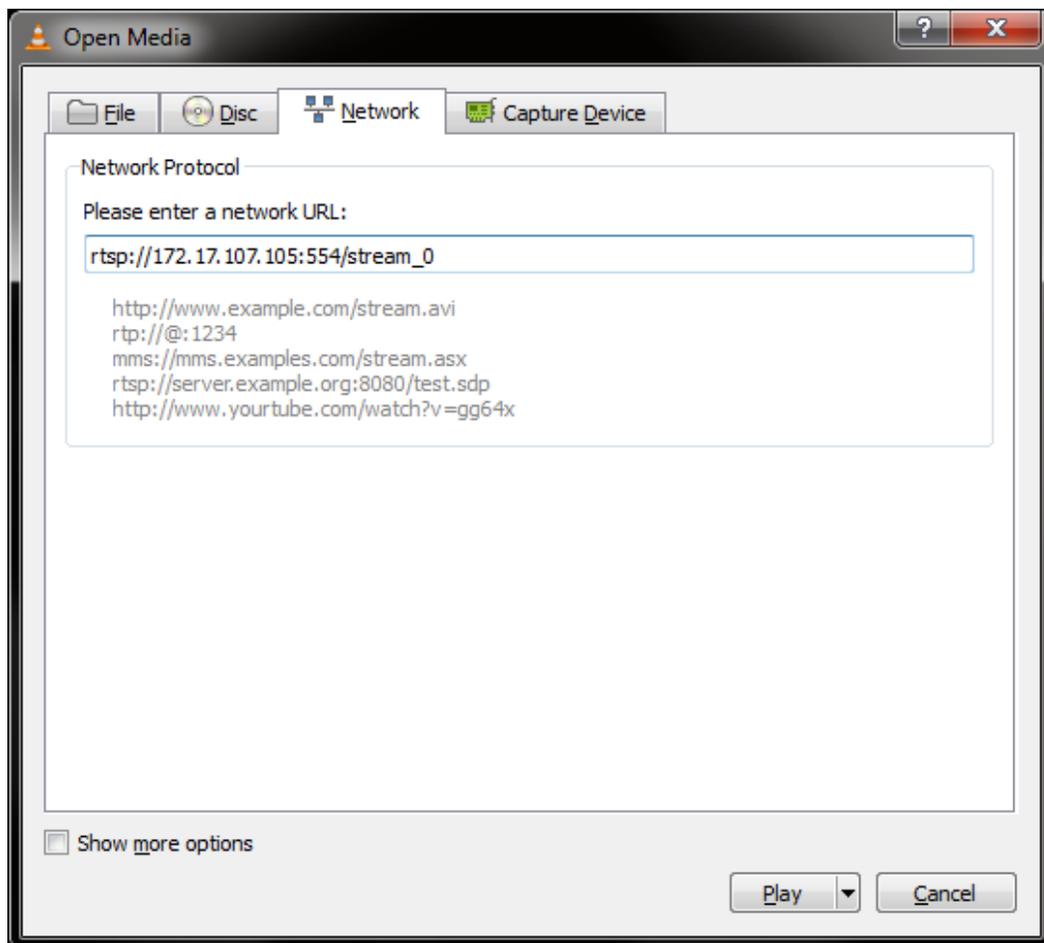
## Setting VLC as the Player

1. Invoke VLC Media Player.
2. Select **Media>Open Network Stream**. The Open Media window appears.
3. Select the **Network** tab and depending on the chosen selected streaming protocol (RTP or UDP) enter the following syntax in the URL field:
  - For RTSP protocol - **rtsp://<IP address>:<port number>/<channel name>** (see example in figure below).

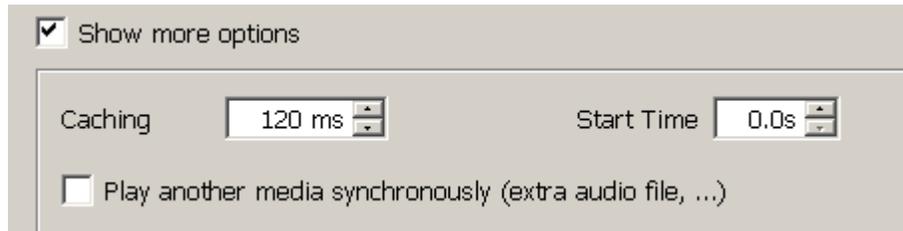


**NOTE:**

- RTSP protocol is supported by the specified above players.
- IP address is the MGW Micro Premium IP address.
- Channel Name is the name as set in the Channels page, Target section.



- For TurboVideo™ you must set **Caching**. Click the **Show more options** check box and set the caching to a value between **120 to 140** milliseconds depending on your network performance.



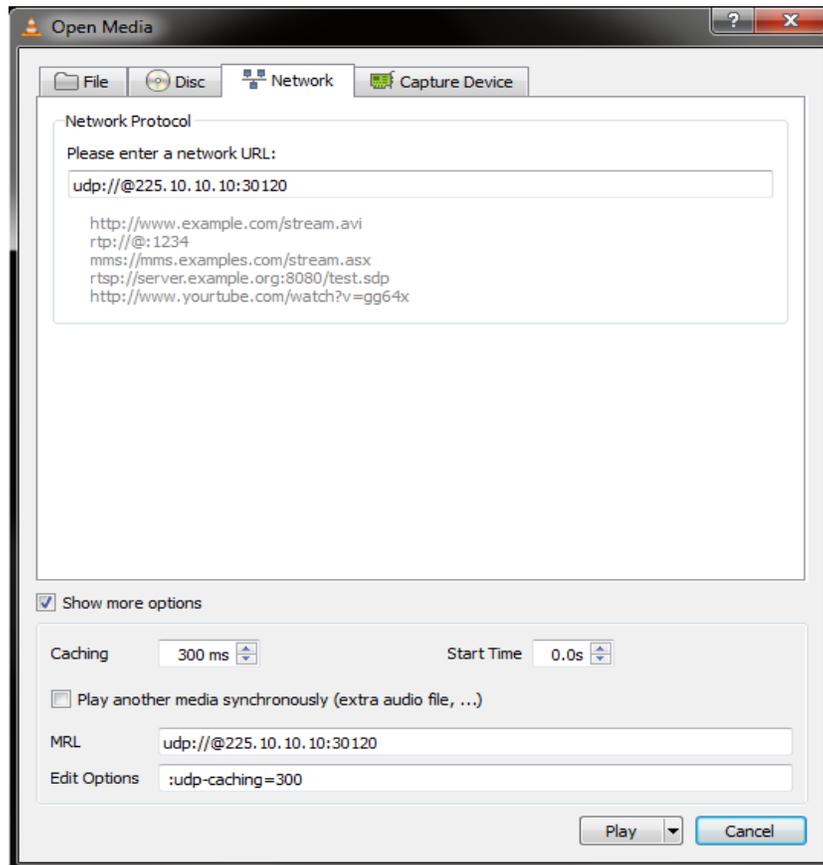
**Figure 5-1 :Setting the Caching**

- For UDP protocol - **udp://@<IP address>:<port number>** (see example in figure below).



**NOTE:**

- IP address is the Target Address as set in Channels page, Target section.
- The port number is the **Target Port** as set in the **Channels** page, **Target** section.

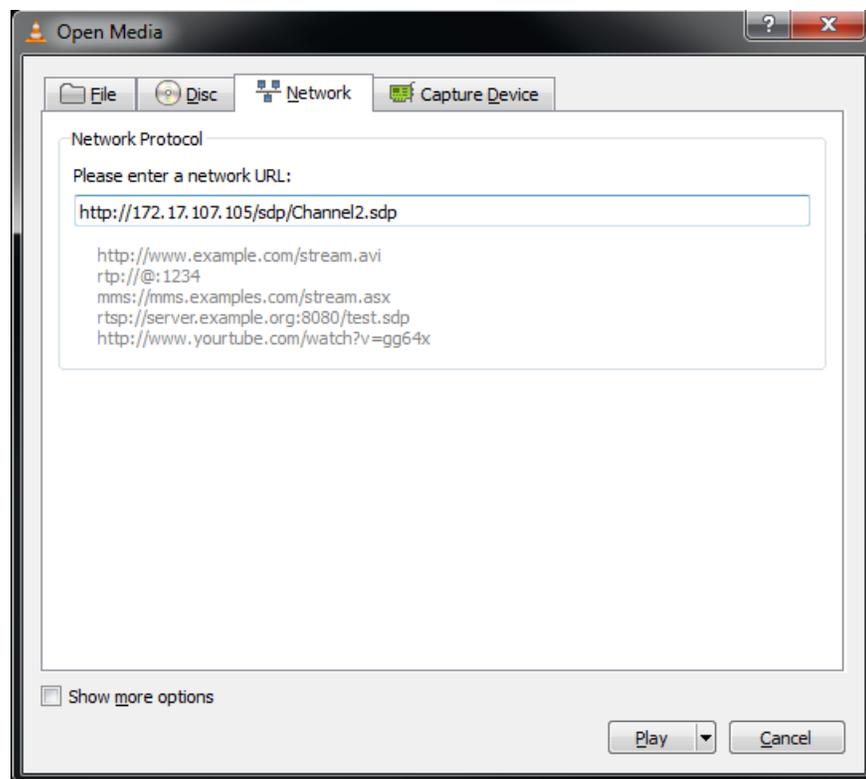


- For HTTP protocol - **http://<IP address>/sdp/<Channel#>** (see example in figure below).



**NOTE:**

- The indicated http path above can be also used for directing viewers to MGW Micro Premium video streams from within a web page.
- Syntax is case sensitive.
- IP address is the MGW Micro Premium IP address.
- Channel number is the number as appears in the **Channels** page, **Num** section.



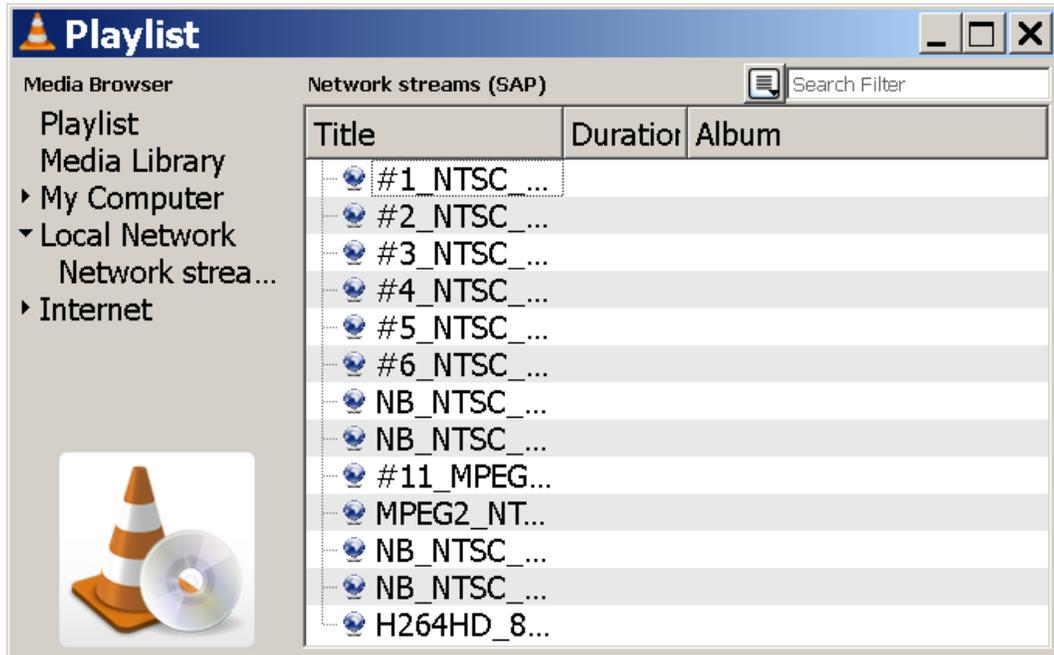
**NOTE:**

When there is no connection between the Player and the MGW Micro Premium appliance, retrieve the SDP file from the appliance using any method of your preference with the http syntax as specified above. After SDP file is retrieved and accessible, use VLC's **File>Open** to upload it.

4. Click **Play**.

**To set VLC Player using SAP protocol:**

1. From VLC main menu select **View>Playlist**. The **Playlist** window appears.
2. Under **Media Browser** expand **Local Network** and select **Network Stream**. A list of available streams appears.

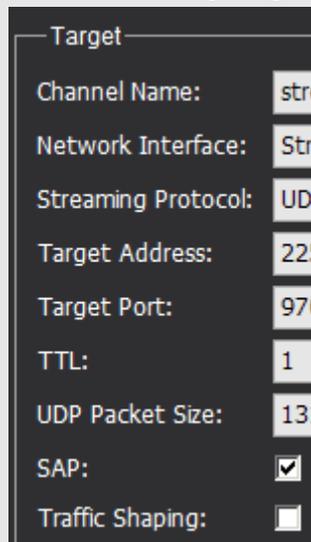


3. Select the desired stream you wish to play.



**NOTE:**

SAP must be activated in Channels page Target section as shown in figure below.



---

## Contact Information

### **Sunnyvale, USA**

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F: +1-(978)-399-0229

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T: +7-(391)-275-10-88

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# Warranty

## Vitec Limited Hardware Warranty Terms

Subject to the terms and conditions specified below your Optibase product (the "**Product**") is warranted against defects in material and workmanship (the "Warranty") for a period of 12 (twelve) months following the Delivery Date (the "**Warranty Period**"). The Warranty provided to you hereunder supersedes any warranty which may be provided to you by the original manufacturer of the Product.

Vitec Multimedia, Optibase Ltd. and/or Optibase Inc. (collectively "**company**") will repair or replace (at its option) any defective part during the Warranty Period, provided that (i) the Warranty remain in force. Your dated sales receipt or invoice shall be considered as the delivery date of the Product from Optibase's premises to your designated address (the "**Delivery Date**"); (ii) your Product unit carries a serial number on its rear panel; (iii) you received from Optibase Customer Service department a Return Materials Authorization (RMA) number. No Product unit will be accepted for repair without RMA number; and (iv) the entire Product unit is returned to the company by prepaid shipping in Vitec's original packaging.

Vitec will not be responsible for (i) any damages resulting from the use, maintenance or installation of any Product; or (ii) for the incorporation of any spare or replacement parts not approved by the company.

Without limiting the generality of the foregoing, The company reserves the right to refuse to provide any services under the Warranty for any Product that, in the company opinion, has been subjected to any abnormal electrical, mechanical, or environmental abuse, or shows signs of modification by an unauthorized person or company. Call your local distributor or reseller for out-of-warranty repair charge estimates prior to returning a product.

You acknowledge that the product licensed or sold hereunder, which may include technology and software, are subject to the export control laws and regulations of the United States ("U.S.") and/or any other country in which the product is received. You agree that you will not knowingly transfer, divert, export or re-export, directly or indirectly, the product, including the software, the software source code, or technical data (as defined by the U.S. Export Administration Regulations) restricted by such regulations or by other applicable national regulations to any person, firm, entity country or destination to which such transfer, diversion, export or re-export is restricted or prohibited by U.S. or other applicable law, without obtaining prior authorization from the U.S. Department of Commerce and other competent government authorities to the extent required by those laws.

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