

Omni HD-1 Configuration Guide

This document is intended to guide you in setting up an Omni HD-1 for use with CMS or NTB. Please note that the streaming license is required for NTBs to be able to play IPTV streams.

Finding the Omni on Your Network and Opening the Web Interface

The usual method to find a new or existing Omni on your network is to use network autodiscovery. With the Omni connected to your network, open the Network section on your Windows computer. The unit should appear as a Media Device, name prefixed HDIP.



Double click on the icon and it will open the web interface in your default browser.

ONELAN 1970-01-01 00:03:16
GMT+0000 (UTC)
Up 3 minutes

IP Streamer

Overview
Encoder Setup
Streaming Setup
Network Setup
Administration

Welcome! ● Need VLC plugin!

Device Name: HDIP218100
Program Name: DEMO-TV
Model Number: OMNI-HD1
Serial Number: 1741 218100
MAC Address: F8:0D:EA:73:53:F4
Firmware Version: 2015020714
Streaming: Multicast

	Video	Audio
Input Source	NONE / ??	Analog
Output Format	AVC CBR / 480p30	MP2
Output Bitrate	4.000 Mbps	128 Kbps
Actual Output	4.971 Mbps	
Encoder Status	Freerun	
Clients	1	

You'll be prompted to log in as soon as you click into the interface.

Default credentials:

Username: admin

Password: Admin123

If you already have the IP address via alternative methods such as DHCP management, you can use that to open the interface instead. Please note access is via port 8888, that is, <https://192.168.1.234:8888>.

Configuration for Multicasting – Omni

Encoder Setup

The settings in here can be left as default unless specifically required otherwise.

The screenshot shows the ONELAN IP Streamer web interface. At the top left is the ONELAN logo. At the top right, the system time is 1970-01-01 00:05:21 GMT+0000 (UTC), and the device is up for 5 minutes. A dark bar below the header contains the text "IP Streamer". On the left side, there is a vertical navigation menu with the following items: Overview, Encoder Setup (highlighted), Streaming Setup, Network Setup, and Administration. The main content area is titled "Encoder Setup". Below the title is a descriptive paragraph: "This page allows the user to configure the encoder's settings. After changes are made use the Save and Confirm button. The encoder will reboot and apply the new settings." The settings are organized into several sections:

- Device Name:** HDIP218100
- Program Name:** DEMO-TV
- Video Input:** Auto detect
- Video Output:** AVC CBR
- AVC Profile:** Default
- AVC Level:** Default
- Video Bitrate:**
 - HD Source:** 4,000 Mbps (2~10 Mbps)
 - SD Source:** 4,000 Mbps (1~4 Mbps)
- Aspect Ratio:** 16:9
- Audio Input:** Auto detect
- Audio Output:** MPEG1 Layer2 (MP2)
- Audio Bitrate:** 128 Kbps
- Brightness:** 128
- Contrast:** 128
- Saturation:** 128
- Hue:** 128
- HDCP Enable:**
- Closed Caption:**

At the bottom of the settings area are two buttons: "Save and Confirm" and "Cancel".

Streaming Setup

Within the Multicasting section, set the options as follows:

- Tick the box for Enable Multicast.
- Leave Enable RTP unticked. This will allow the Omni to use UDP, as supported by NTB and CMS.
- Other settings can be left as their defaults.

All other settings, HTTP and Unicasting, should be left clear.

Click Save and Confirm.

The screenshot shows the ONELAN IP Streamer web interface. The top left features the ONELAN logo. The top right displays the system time: 1970-01-01 00:06:05 GMT+0000 (UTC) and 'Up 6 minutes'. Below the logo is a navigation menu with 'Overview', 'Encoder Setup', 'Streaming Setup', 'Network Setup', and 'Administration'. The main heading is 'Streaming Setup', with a sub-heading 'This page allows the user to configure the streaming settings.' The configuration is divided into three sections: 'HTTP (DLNA Default)', 'Multicasting', and 'Unicasting'. In the 'Multicasting' section, 'Enable Multicast' is checked, 'Group IP' is 224.1.1.1, 'Multicast Port' is 1234, and 'Multicast TTL' is 4. 'Enable RTP' is unchecked. In the 'Unicasting' section, 'Protocol' is set to 'UDP'. At the bottom, there are 'Save and Confirm' and 'Cancel' buttons.

ONELAN 1970-01-01 00:06:05 GMT+0000 (UTC) Up 6 minutes

IP Streamer

Overview
Encoder Setup
Streaming Setup
Network Setup
Administration

Streaming Setup

This page allows the user to configure the streaming settings.

HTTP (DLNA Default)

Enable HTTP:
Enable Auth.:
RADIUS IP:
RADIUS Secret:

Multicasting

Enable Multicast:
Group IP:
Multicast Port:
Multicast TTL:
Enable RTP:

Unicasting

Protocol:
Destination IP:
Destination Port:
Add
Casting List:
Remove

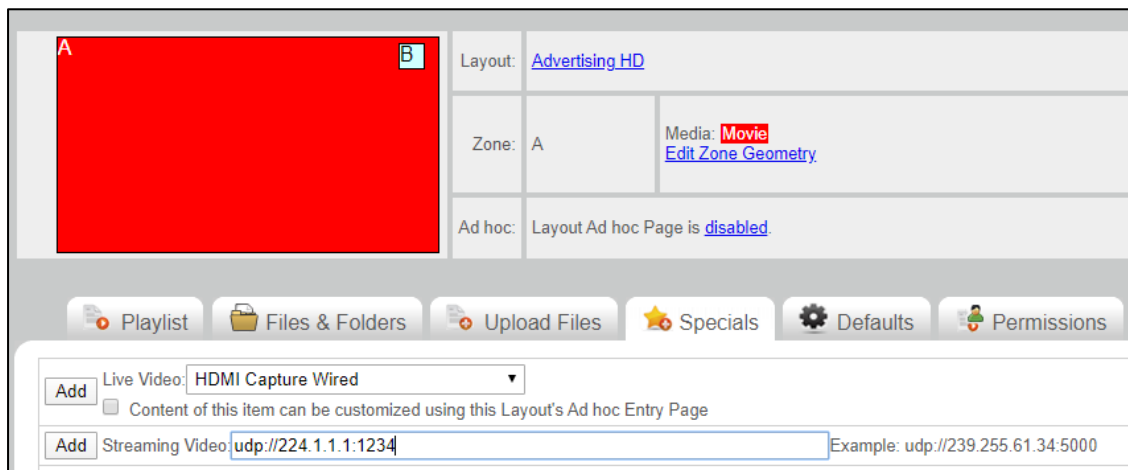
Save and Confirm Cancel

Configuration for Multicasting – CMS/NTB

The Omni HD-1 doesn't use SAP announcements, so it is necessary to specifically set the multicast address in the content.

To do so:

1. Navigate to the relevant playlist on your NTB or CMS: Playlist > [Your Layout] > [Your Playlist].
2. Click on the Specials tab.
3. In the Streaming Video section, enter `udp://224.1.1.1:1234`.



4. Click Add to add the entry to your playlist.

Configuration for Unicasting – Omni

As with multicasting, the encoder setup can be left as default unless specifically required otherwise.

Streaming Setup

Within the Multicasting section, set the options as follows:

- Untick the box for Enable Multicast.

Within the Unicasting section, enter the following details for recipient devices:

- Destination IP: enter the IP address for the player.
- Destination Port: select a port number from 10,000 onwards. You will need this value later for configuration on your NTB or CMS.

Click Add to enter this information into the Casting List. Repeat this for any other players that are to receive the stream.

The screenshot shows the ONELAN IP Streamer web interface. At the top right, it displays the date and time '1970-01-01 00:16:10 GMT+0000 (UTC)' and 'Up 16 minutes'. The main title is 'Streaming Setup' with a subtitle 'This page allows the user to configure the streaming settings.' On the left, there is a navigation menu with 'Streaming Setup' selected. The configuration is divided into three sections: 'HTTP (DLNA Default)', 'Multicasting', and 'Unicasting'. The 'Unicasting' section is active, showing 'Protocol' set to 'UDP', 'Destination IP' as '192.168.12.34', and 'Destination Port' as '10000'. An 'Add' button is visible, and the 'Casting List' contains two entries: 'udp://192.168.1.234:10000' and 'udp://192.168.12.34:10000'. At the bottom, there are 'Save and Confirm' and 'Cancel' buttons.

Click Save and Confirm.

Configuration for Unicasting – CMS/NTB

1. On your NTB or CMS, navigate to Setup > System > Security.
2. Select the Firewall tab.
3. At the bottom of the page, under Movie Player Unicast Listener Service settings, tick the box for Enable Movie Player Unicast Listener.
4. Enter the port number that you chose in the Omni configuration step to the list.

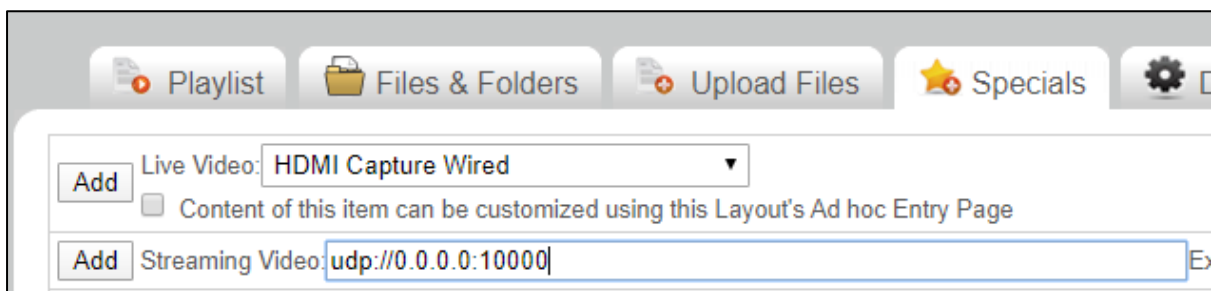
Movie Player Unicast Listener Service settings	
Service State:	<input checked="" type="checkbox"/> Enable Movie Player Unicast Listener
Listening Ports:	10000

5. Click the Save Security Settings button at the top of the tab.

This opens the port in the firewall, so that the player can receive the stream from the Omni. It must be applied to any player that is to receive the stream.

Finally, add the following streaming entry to your content, using the Specials tab on the playlist as per the [Multicasting](#) settings.

This should be in the following format: `udp://0.0.0.0:10000`



The screenshot shows a web interface with a top navigation bar containing 'Playlist', 'Files & Folders', 'Upload Files', 'Specials', and a settings icon. Below the navigation bar, there is a form with two rows. The first row is labeled 'Live Video:' and has a dropdown menu set to 'HDMI Capture Wired'. Below this is a checkbox labeled 'Content of this item can be customized using this Layout's Ad hoc Entry Page'. The second row is labeled 'Streaming Video:' and has a text input field containing the URL 'udp://0.0.0.0:10000'. There are 'Add' buttons to the left of each row.

This tells the player to look at its local addresses, on the specific port number you specified earlier.