

# Johansson 8210 HDMI Streaming Made Easy



# Agenda

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- **Topics:**

- General Information
- Use Cases
- Hardware
- Basic Configuration
- Advanced Configuration
- Demo
- Q&A

## General information

The **Johansson HDMI Streamer** is designed for **small to medium-sized** projects. It is a **High Definition Video and Audio** Encoder that makes it **easy** to put your HDMI source on a (local) network and/or internet. This gives the end-user the **flexibility** to see your **real-time video** content on their preferred (mobile) device: **smartphone, tablet, laptop or SmartTV**. The end-user can simply surf to a dedicated webpage or streaming service. No need to install a mobile application or dedicated software, it works in any **web browser**.

- Website link:
  - <https://unitrongroup.com/8210.html>
- Leaflet link:
  - <https://unitrongroup.com/download.php?lang=en&id=975>
- User manual link:
  - <https://unitrongroup.com/download.php?lang=en&id=982>

## General information

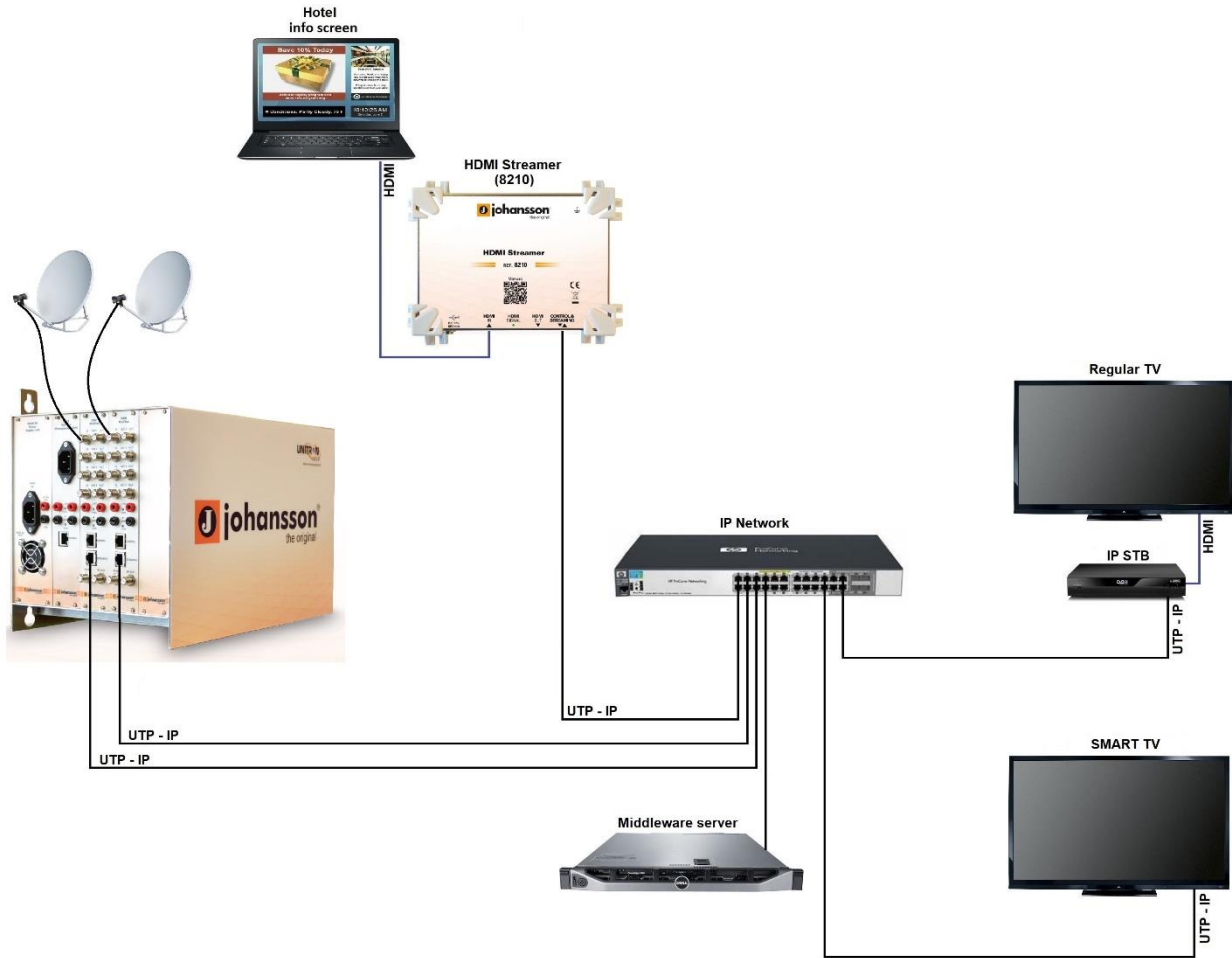


- **Advantages:**

- All-in-one plug-and-play live streaming solution.
- Stream any HDMI source hassle free on any IP network, local WIFI/LAN or public internet.
- Watch on any screen: Phones, Tablets, Smart TVs, PCs or IP Set Top Box.
- No dedicated software required, watch via web browser or free video player (e.g. VLC)
- Multi standard: Multicast UDP/RTP and Unicast M3U8/HLS/RTMP/HTTP
- Stream easily to any video sharing platform such as Youtube Live, Facebook,...

- **Use Cases:**
  - [Use case 1: IPTV Hospitality solution](#)
  - [Use case 2: Bus Stop - Waiting Room – Coffee bar](#)
  - [Use case 3: Remote school – Religious services](#)
  - [Use case 4: Youtube – Facebook Streaming](#)
  - [Use case 5: Digital Signage](#)
  - [Use case 6: Surveillance Camera System](#)
  - [Use case 7: Emergency - Field Service people](#)
  - [Use case 8: Public transport entertainment](#)
  - and many more...

# Use case 1 Hotel IPTV solution



- **Who:** IPTV Hospitality solution, add info channel
- **What:** Local multicast streaming to unlimited number of TV's
- **Where:**
  - Hotel
  - Hospital
- **Why:** Add information / video channel to IPTV
- **How:** Via Local Area Network using UDP multicast streaming

## Use case 2 Bus Stop – Waiting Room – Coffee bar

8210 Johansson HDMI Streamer



Wireless Router



Media Player



TV Set Top Box



Info Channel

Bus stop



Waiting Room



Coffee bar



- **Who:** For people who are waiting or relaxing
- **What:** Local streaming (LAN) for small audience (1 till 30)
- **Where:**
  - Bar or restaurant
  - Waiting rooms
  - Bus stops
- **Why:** Provide information/entertainment
- **How:** Via local WIFI network using HLS streaming

## Use case 3 Remote school – Religious services

Classroom projector



Home learning



8210 Johansson HDMI Streamer



Internet Modem  
with port forwarding

Internet

- **Who:** For people who wants to follow a course or religious service remotely
- **What:** Internet streaming (OTT) for small audience (1 till 30)
- **Where:**
  - Places of worship
  - Education/school
  - Corporations
- **Why:** Remote viewing
- **How:** Via public internet using Port Forwarding



# Use case 4 YouTube – Facebook Streaming

Vlogger



Youtube



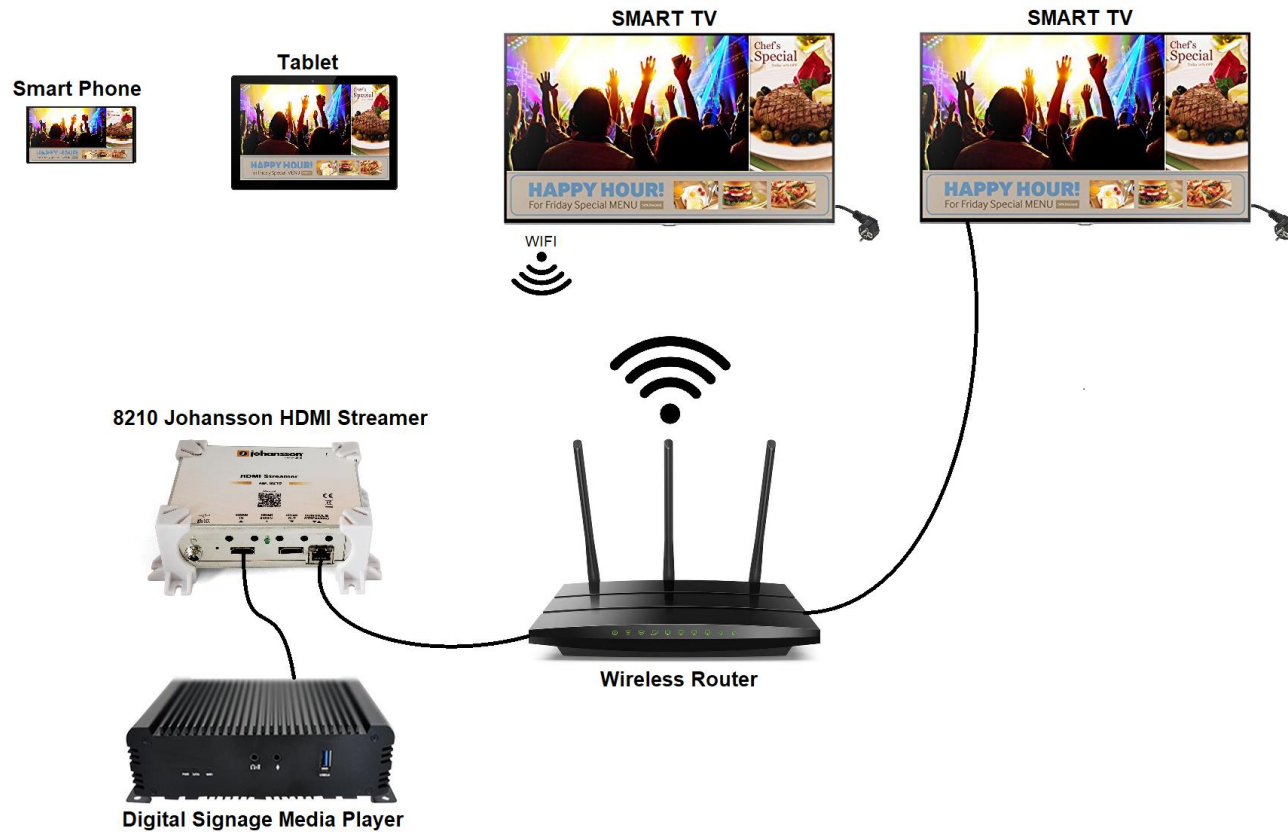
8210 Johansson HDMI Streamer



RTMP streaming

- **Who:** For people who want to reach a huge audience
- **What:** Internet streaming (OTT) for large audience (1 - ∞)
- **Where:**
  - Vloggers
  - Places of worship
  - Education/school
  - Conferences
- **Why:** Share content with the world
- **How:** Via public internet using RTMP streaming

# Use case 5 Digital Signage



- **Who:** Customers, Visitors, Guests
- **What:** Advertising, information, entertainment
- **Where:**
  - Retail stores
  - Restaurants and bars
  - Museums
  - Public spaces
- **Why:** One media player for different screens. Wireless streaming.
- **How:** Via local LAN / WIFI network using HLS streaming

# Use case 6 Surveillance Camera System



- **Who:** Residents, Inhabitants
- **What:** Security
- **Where:**
  - Private homes
  - Corporate offices
  - Gated communities
  - Public spaces
- **Why:** Watch surveillance cameras on any device Smart TV, Phones, Tablets, PC without dedicated software.
- **How:** Via local LAN / WIFI network using HLS or m3u8 streaming

## Use case 7 Emergency - Field Service people

Control Room / Helpdesk



Emergency and Field Service people



8210 Johansson HDMI Streamer

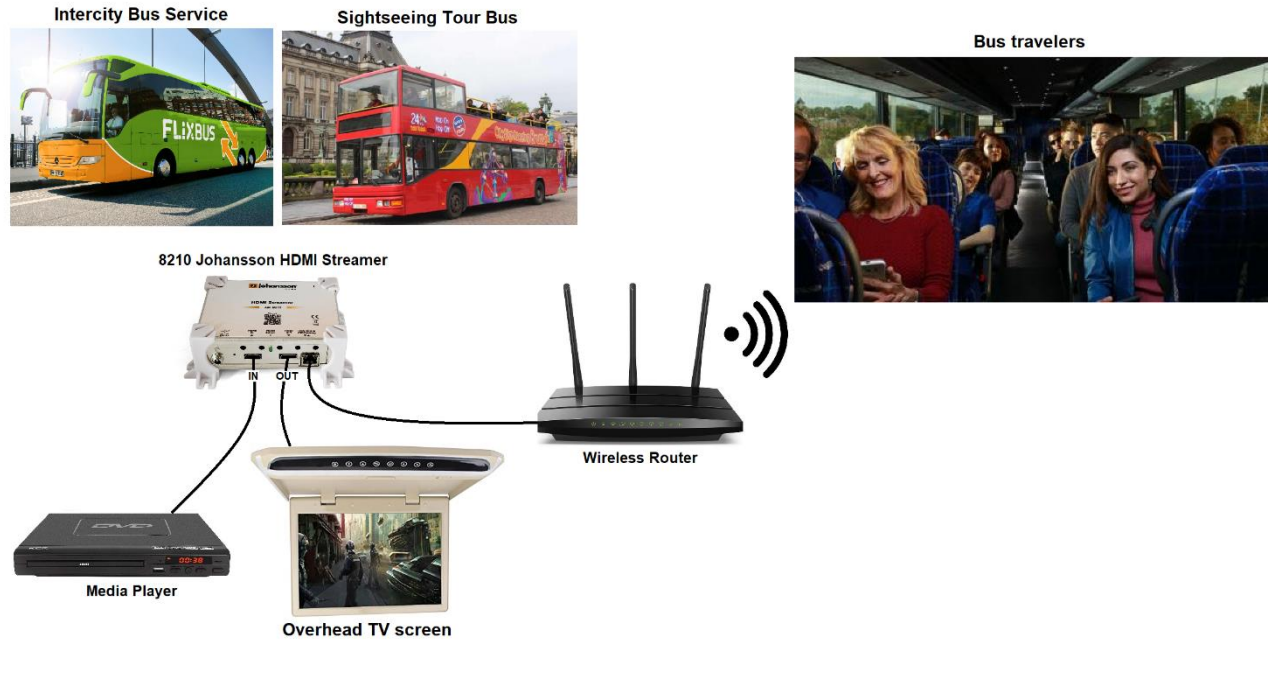


Internet Modem  
with port forwarding

Internet

- **Who:** Police, Fireman, Field service engineer
- **What:** Emergency and field service support from control room or helpdesk
- **Where:**
  - Anywhere
- **Why:** Share important information hassle free with people in the field
- **How:** Via public internet using Port Forwarding

## Use case 8 Public transport entertainment



- **Who:** Travellers, Tourist
- **What:** Provide entertainment/information
- **Where:**
  - Intercity bus
  - Guided tour bus
  - City Sightseeing (Hop-on-hop off bus)
- **Why:** Easily provide entertainment or information to travellers and tourists.
- **How:** Via local LAN / WIFI network using HLS or m3u8 streaming



Power indicator

Power input

HDMI IN

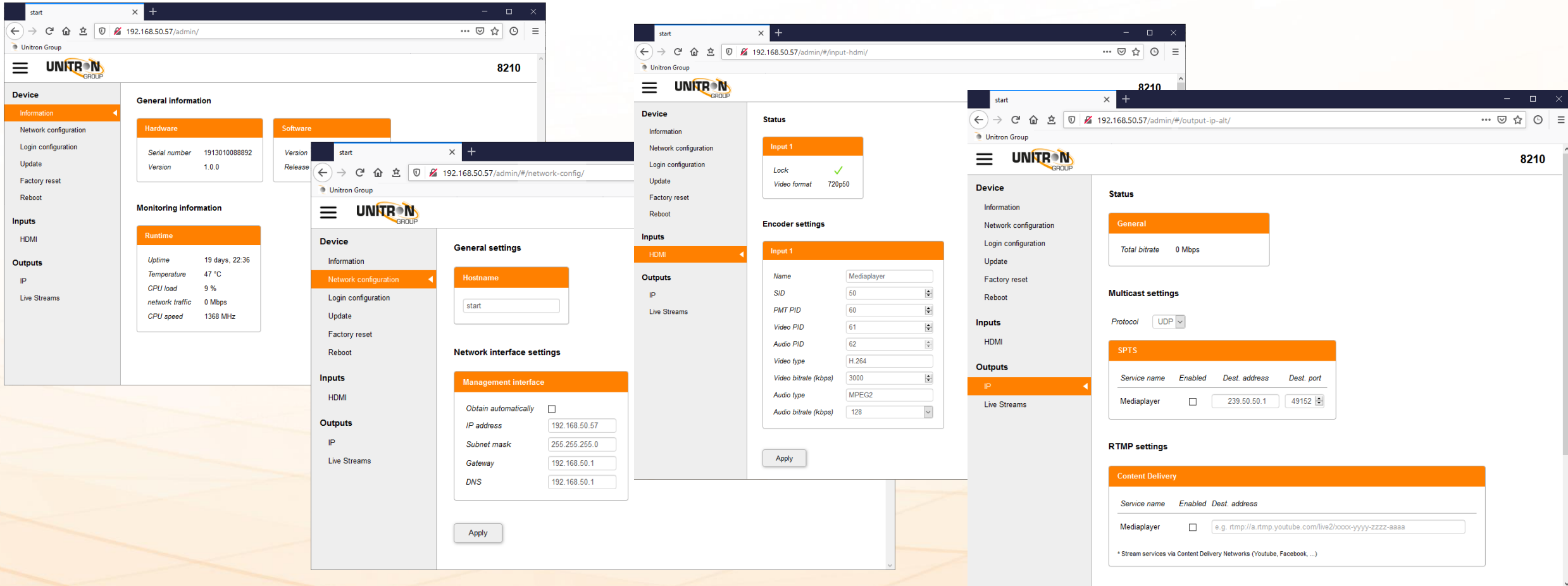
Signal lock indicator

HDMI OUT

Ethernet port

# Basic Configuration

## Via web interface



The image displays three overlapping screenshots of the UNITRON web interface, illustrating the basic configuration process. The interface is accessed via a web browser at 192.168.50.57/admin/.

**Screenshot 1: General Information**  
The 'General information' page shows hardware and software details. Hardware includes Serial number 191301008892 and Version 1.0.0. Software includes Version and Release. Monitoring information shows Runtime: Uptime 19 days, 22:36; Temperature 47 °C; CPU load 9%; network traffic 0 Mbps; CPU speed 1368 MHz.

**Screenshot 2: Network Configuration**  
The 'Network configuration' page shows general settings and network interface settings. General settings include Hostname 'start'. Network interface settings for the management interface include: Obtain automatically (unchecked), IP address 192.168.50.57, Subnet mask 255.255.255.0, Gateway 192.168.50.1, and DNS 192.168.50.1.

**Screenshot 3: Output Settings**  
The 'Output' page shows the configuration for 'IP' output. The 'Status' section shows 'Input 1' is locked and in 720p50 video format. Encoder settings for 'Input 1' include: Name 'Mediaplayer', SID 50, PMT PID 60, Video PID 61, Audio PID 62, Video type H.264, Video bitrate 3000 kbps, Audio type MPEG2, and Audio bitrate 128 kbps. Multicast settings show Protocol set to UDP. SPTS settings show a service named 'Mediaplayer' with Dest. address 239.50.50.1 and Dest. port 49152. RTMP settings show a service named 'Mediaplayer' with Dest. address e.g. rtmp://a.rtmp.youtube.com/live2/xxxx-yyyy-zzzz-aaaa.

- **Advanced Configuration:**
  - [Advanced Config 1: LAN streaming via Local IP address or host name](#)
  - [Advanced Config 2: Internet streaming - Port forwarding](#)
  - [Advanced Config 3: Internet streaming \(Youtube,...\) : RTMP streaming](#)
  - [Advanced Config 4: Watch video in media player \(VLC\) or IP Set Top Box](#)
  - [Advanced Config 5: Multiple channels on same web page](#)
  - [Advanced Config 6: Create QR code for easy access](#)



## Advanced Config 1

# LAN streaming via Local IP address or host name

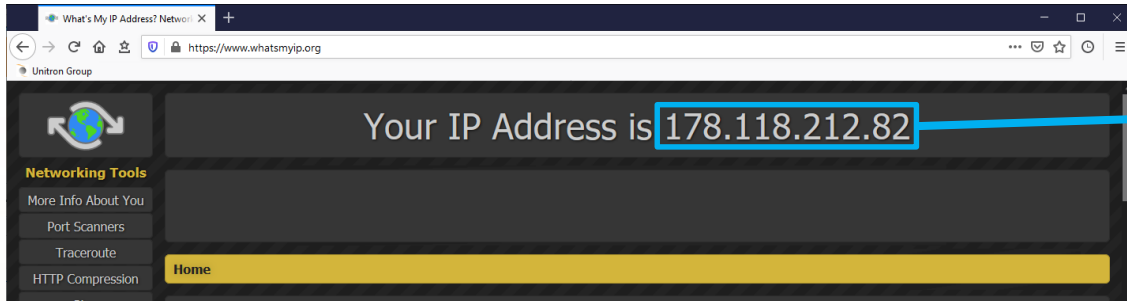
The image displays three overlapping browser windows illustrating the configuration and streaming process:

- Left Window:** Shows the UNITRON configuration interface. The **Network configuration** menu is selected. Under **General settings**, the **Hostname** field is set to "start". Under **Network interface settings**, the **Management interface** section shows the **IP address** field set to "192.168.50.57".
- Top Window:** Shows the UNITRON **Live Streams** page. The **Start** button in the top navigation bar is highlighted with a red box.
- Right Window:** Shows a video player displaying a live stream. The URL in the address bar is `192.168.50.57/medioplayer.php?src=aHR0cDovLzE3OC4xMTguMjE5LjgyOjU2MjMwL3Ni...`. The stream content shows a woman singing, with the **radionorba TV** logo and the hashtag **#andràtuttobene** visible. The video player controls at the bottom show a progress bar at 0:53 and a volume icon.

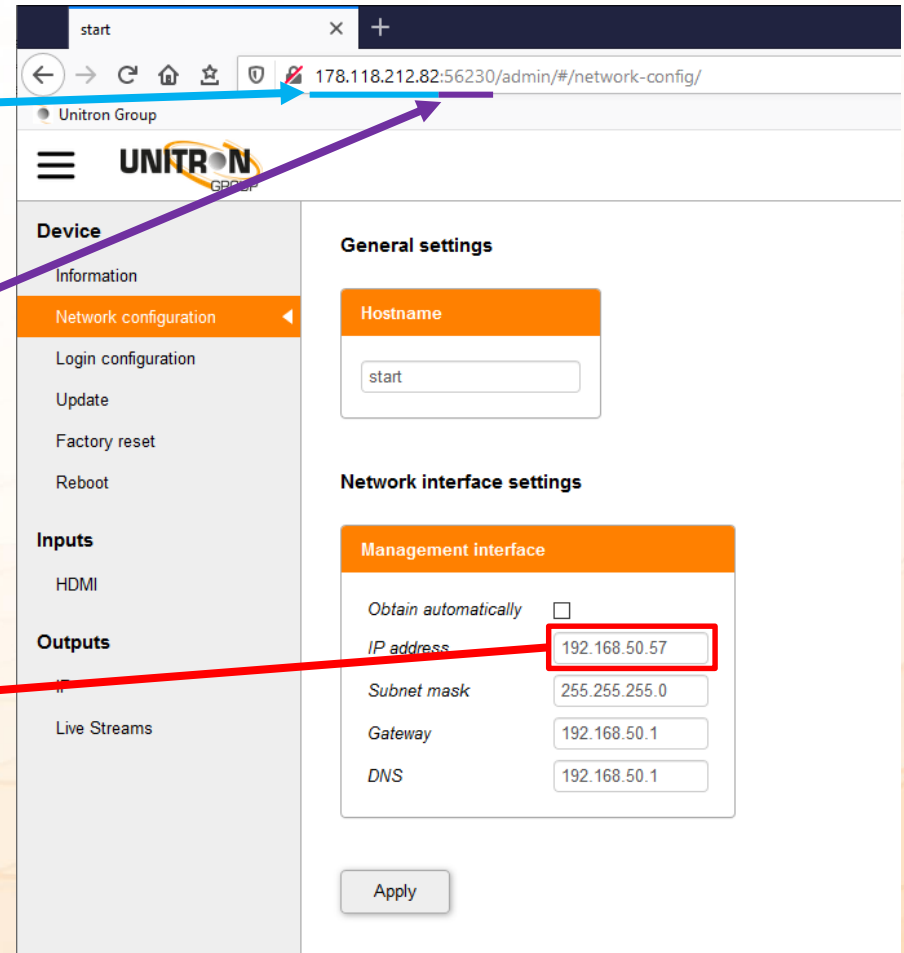
Red arrows indicate the flow of information: one arrow points from the **Start** button in the top window to the **Start** button in the right window, and another arrow points from the **IP address** field in the left window to the **192.168.50.57** portion of the URL in the right window.

## Advanced Config 2 Internet streaming - Port forwarding

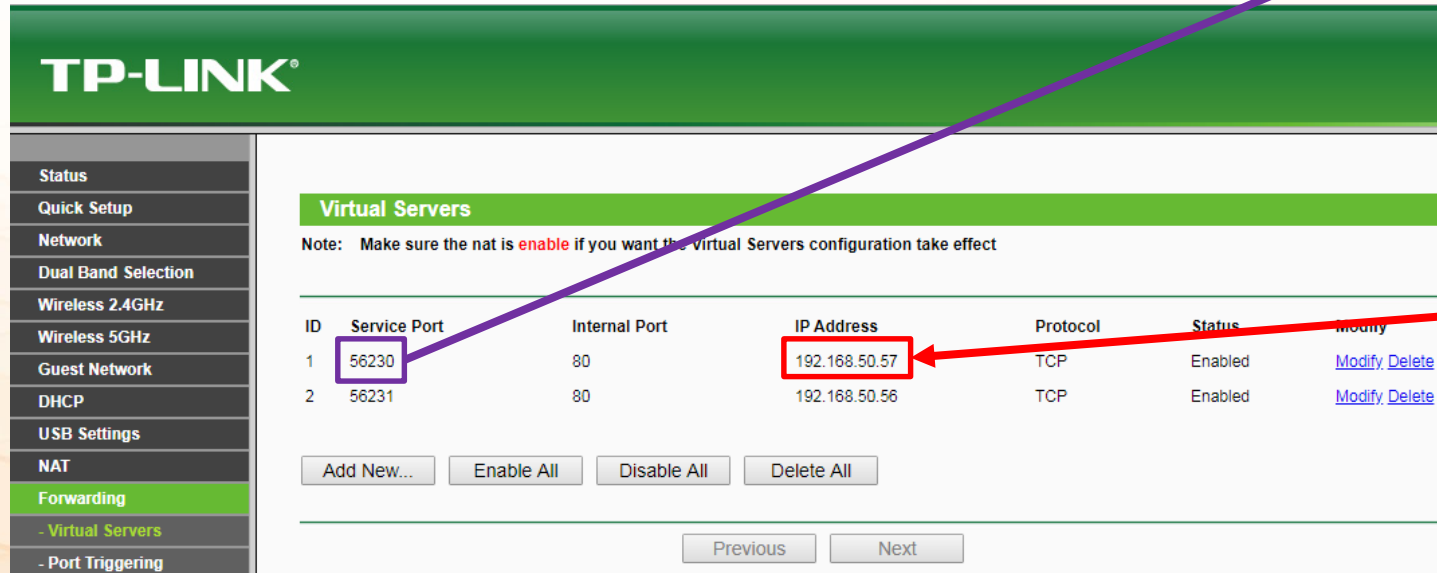
www.whatsmyip.org



Web browser




Network modem or router



# Internet streaming (Youtube,...) : RTMP streaming

### Youtube Studio

Stream setup help



- 1 Download and set up your streaming software  
[Learn more about streaming software](#)
- 2 Paste the stream key into your software  
Stream name/key (paste in encoder)  
**thdm-2p0r-ah4h-fp93**   
You may also need:  
Stream URL  
**rtmp://a.rtmp.youtube.com/live2**
- 3 In your streaming software, start sending us your video stream
- 4 Click 'Done' and then click 'Go Live' to start streaming

### 8210 – RTMP settings

start

192.168.50.57/admin/index.html#/output-ip-alt/

Unitron Group

UNITRON GROUP 8210G

Device

- Information
- Network configuration
- Login configuration
- Update
- Factory reset
- Reboot

Inputs

- HDMI

Outputs

- IP
- Live Streams

Protocol UDP

SPTS

Service name	Enabled	Dest. address	Dest. port
Webcam	<input type="checkbox"/>	239.50.50.1	49152

RTMP settings

Content Delivery

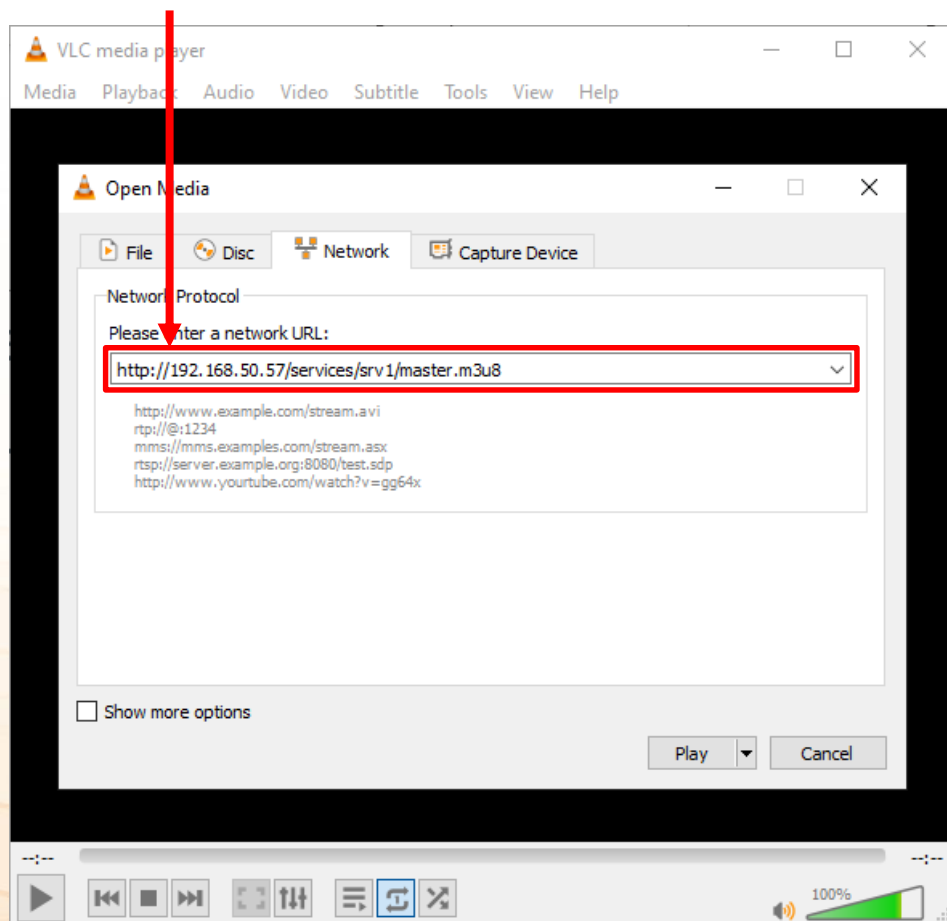
Service name	Enabled	Dest. address
Webcam	<input type="checkbox"/>	rtmp://a.rtmp.youtube.com/live2/thdm-2p0r-ah4h-fp93

\* Stream services via Content Delivery Networks (Youtube, Facebook, ...)

# Watch video in media player (VLC) or IP Set Top Box

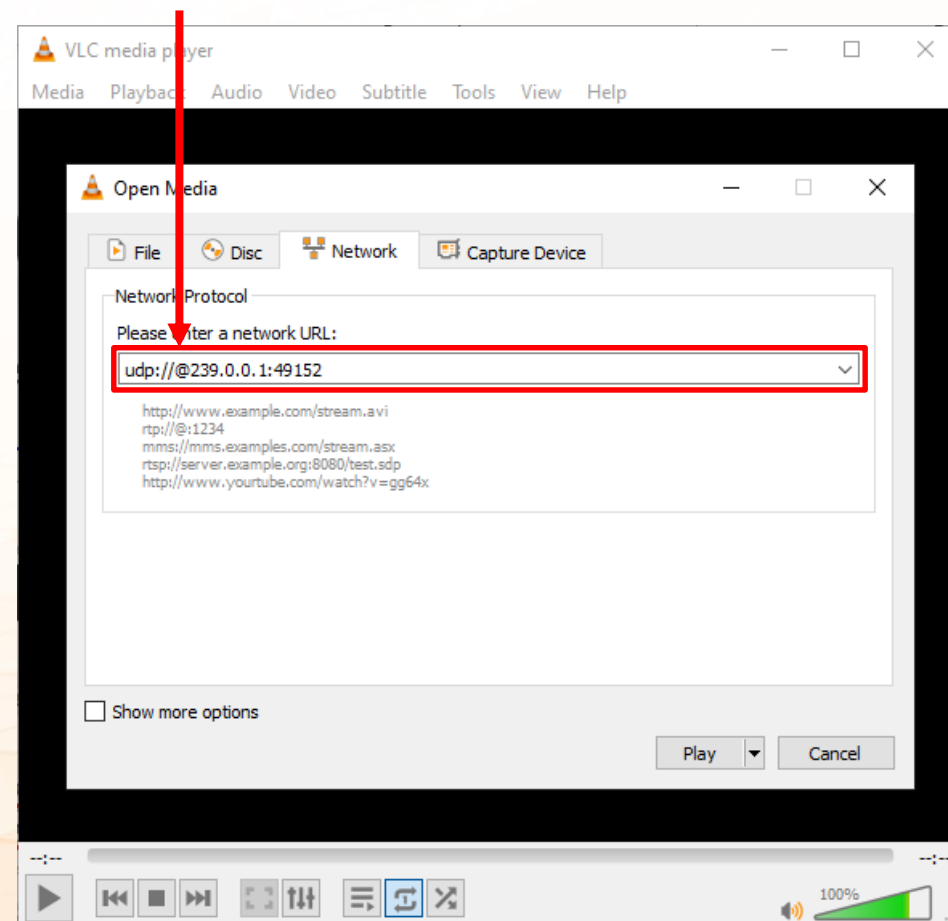
HLS unicast streaming:

<http://192.168.50.57/services/srv1/master.m3u8>



UDP multicast streaming:

<udp://@239.0.0.1:49152>



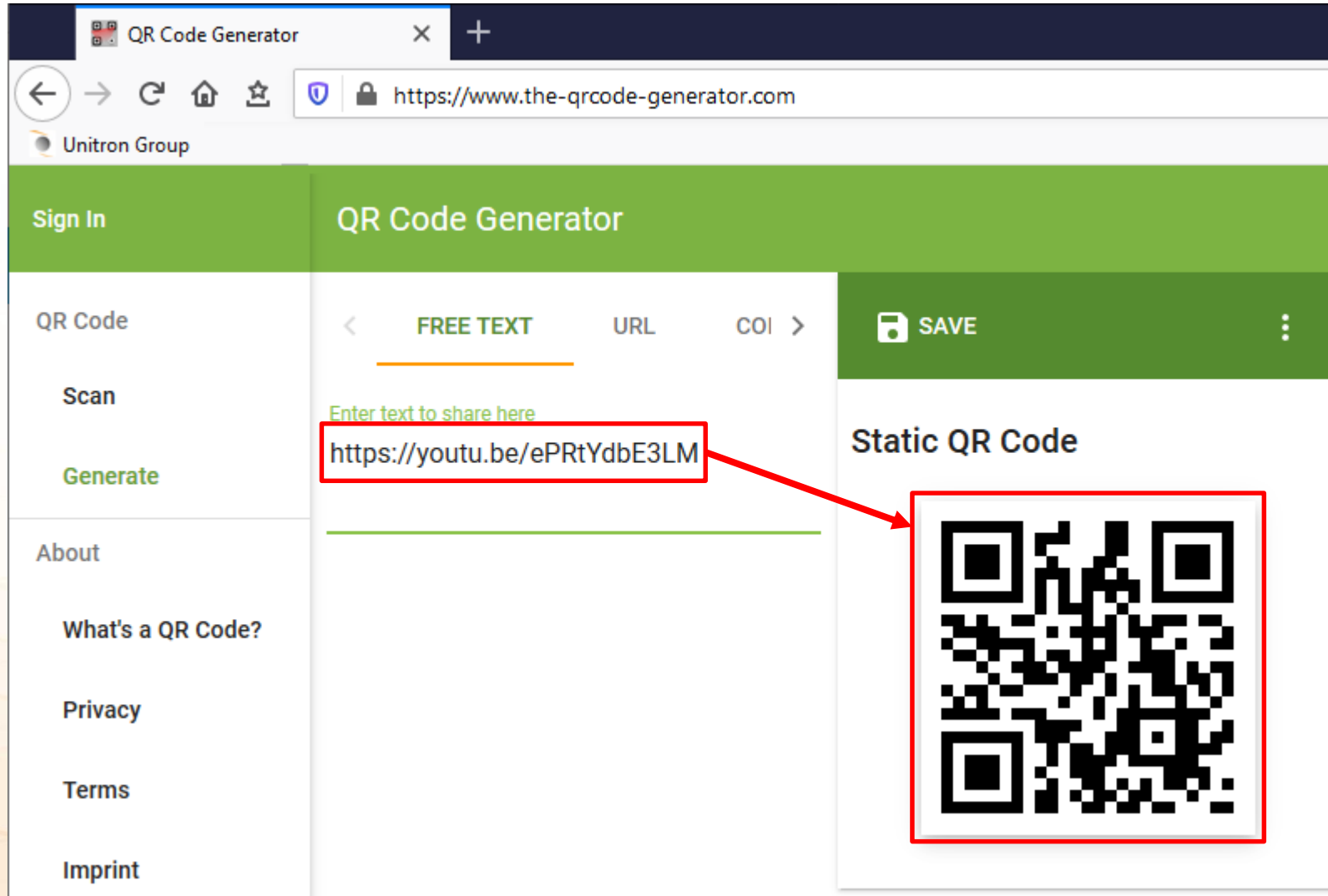
## Advanced Config 5 Multiple channels on same web page

The screenshot shows the Unitron Group web interface. The left sidebar contains a menu with categories: Device, Inputs, and Outputs. Under 'Outputs', 'IP' and 'Live Streams' are listed. The main content area is titled 'RTMP settings' and is divided into two sections: 'Content Delivery' and 'HLS settings'. The 'Content Delivery' section has a table with columns 'Service name', 'Enabled', and 'Dest. address'. A 'Mediaplayer' entry is shown with a checkbox and a text input field containing 'e.g. rtmp://a.rtmp.youtube.com/live2/xxxx-yyyy-zzzz-aaaa'. Below this is a note: '\* Stream services via Content Delivery Networks (Youtube, Facebook, ...)'. The 'HLS settings' section has a section titled 'Additional hosts' with a 'Hosts' input field containing '192.168.50.56'. Below this is a note: '\* Include services from similar devices as "Live Streams"'. An 'Apply' button is at the bottom.

The screenshot shows the Unitron Group web interface with the 'Live Streams' section active. It displays two video feeds: 'Mediaplayer' and 'Webcam'. The 'Webcam' feed is highlighted with a red box and shows a timestamp of '2020-04-28 17:11:42'. A red arrow points from the '192.168.50.56' IP address in the 'HLS settings' of the previous screenshot to the 'Webcam' feed in this screenshot.

# Advanced Config 6

## Create QR code for easy access



# Demo

- Port forwarding:  
<http://178.118.212.82:56230>



- VLC:  
<http://178.118.212.82:56231/services/srv1/master.m3u8>



- Youtube:  
<https://youtu.be/ePRtYdbE3LM>



# Thank you

[www.unitrongroup.com](http://www.unitrongroup.com)

Frankrijklaan 27  
8970 Poperinge – Belgium  
+32 57 33 33 63  
[sales@unitrongroup.com](mailto:sales@unitrongroup.com)

