



VIP-STREAM-100 II  
HDMI Streaming Encoder w/Image Capture  
USER MANUAL



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## What's in The Box

### VIP-STREAM-100 II Encoder

- 1 x VIP-STREAM-100 II encoder
- 1 x AC to DC power adapter

### Optional Accessories

- VIP-STREAM-100 II RACK4 (provides rack mounting of 4 transmitters in a 1RU rack space)
- PureStream VIP-NET Video over IP Network Switches
  - <https://www.purelinkav.com/product-category/video-over-ip/network-switches-vip/>



## Product Description

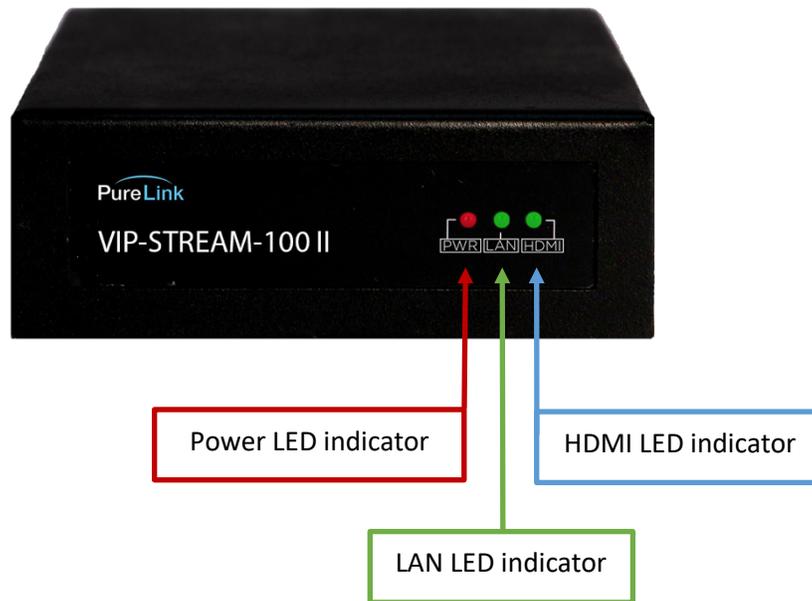
The VIP-STREAM-100 II product provides input support of up to 1080p@60 resolutions and HDCP 1.3. The output is H.264 multicast stream and is supported by several software applications that can grab the video/audio stream, including VLC Player. This second generation (VIP-STREAM-100 II) encoder provides two additional functions in addition to the original VIP-STREAM-100:

- RTMPS streaming for endpoints such as FaceBook
- Image capture

## Specifications

- Input video support
  - 1080p60
  - 1080p30
  - 1080p24
  - 720p60
  - 720p30
- Input audio support
  - HDMI input
- HDCP compliance
  - HDCP 1.3
- Data rate
  - Up to 16Mbps

## Front Panel - TX (encoder/transmitter)



### *Power LED indicator*

Illuminates when correct power source is applied to the 12-volt d.c. inlet.

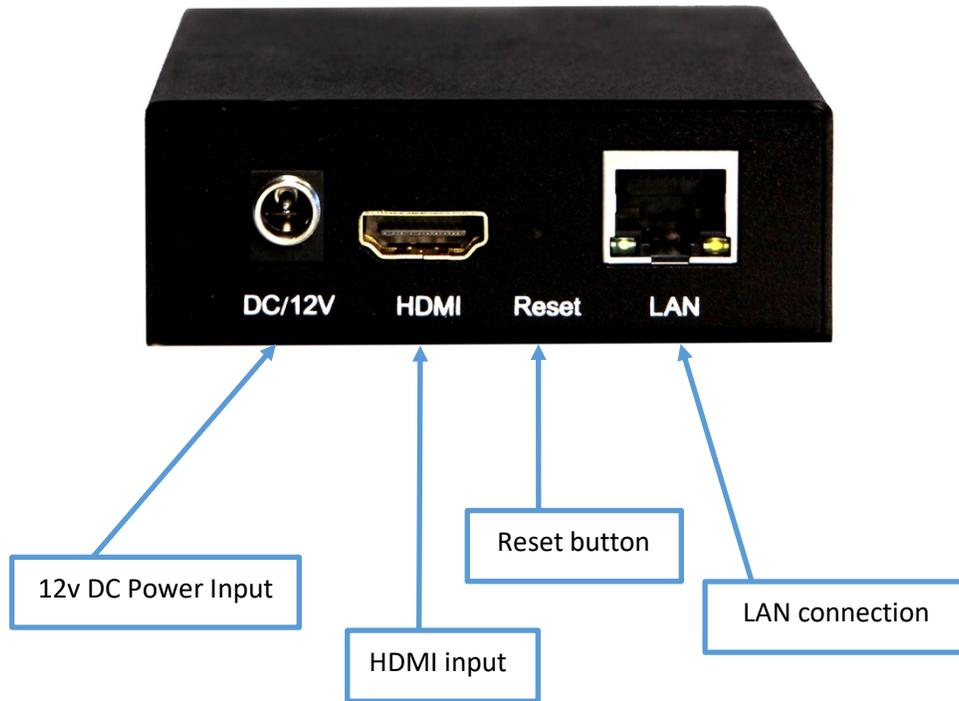
### *LAN LED indicator*

Illuminates when LAN connection is confirmed.

### *HDMI LED indicator*

Illuminates when there is a successful connection to the HDMI source.

## Rear Panel - TX (encoder/transmitter)



## Things to Know Before You Start

VIP-STREAM-100 II encoders are set factory default to a unique IP address of 192.168.1.168.

## Setting your computer to communicate with VIP-STREAM-100 II

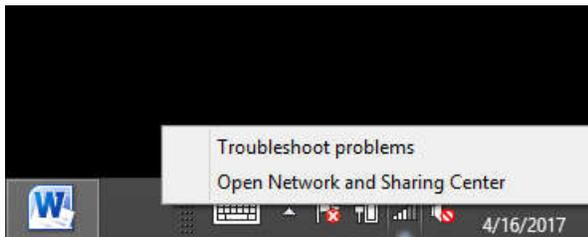
Devices that need to communicate with each other on a network must be in the same IP subnet and not separated by a VLAN configuration.

You will need to set your computer to be on the same subnet. While the interface and steps on achieving this will be different for each OS and versions of OS, they all require that you set the ipv4 settings of your LAN adapter. You may have more than one LAN adapter, so be certain you are working with the correct one.

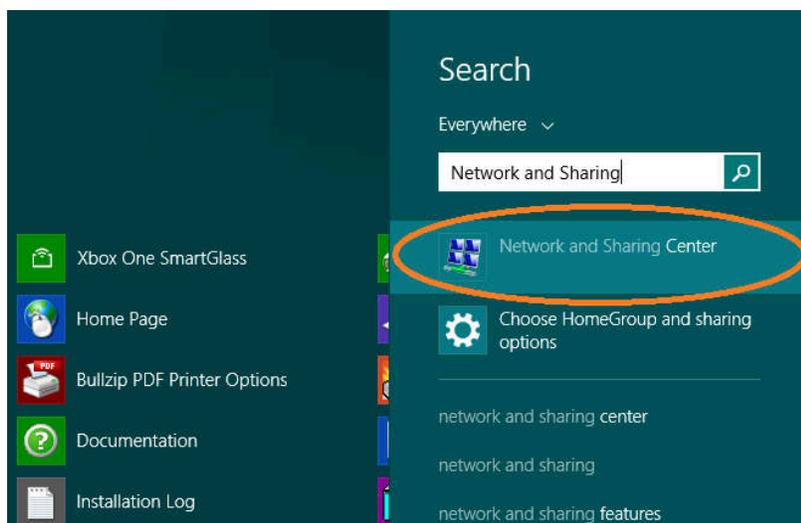
## Windows 8.1 and Windows 10 Computer LAN Port Setup

### Opening Network Page

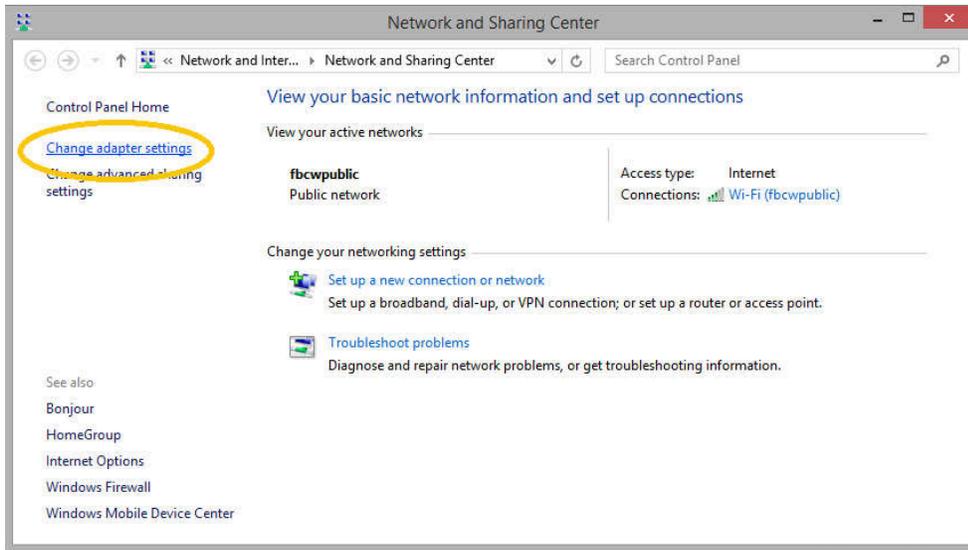
**Option 1:** Right Click on the taskbar icon that looks like a signal strength indicator. Then click on “Open Network and Sharing Center”



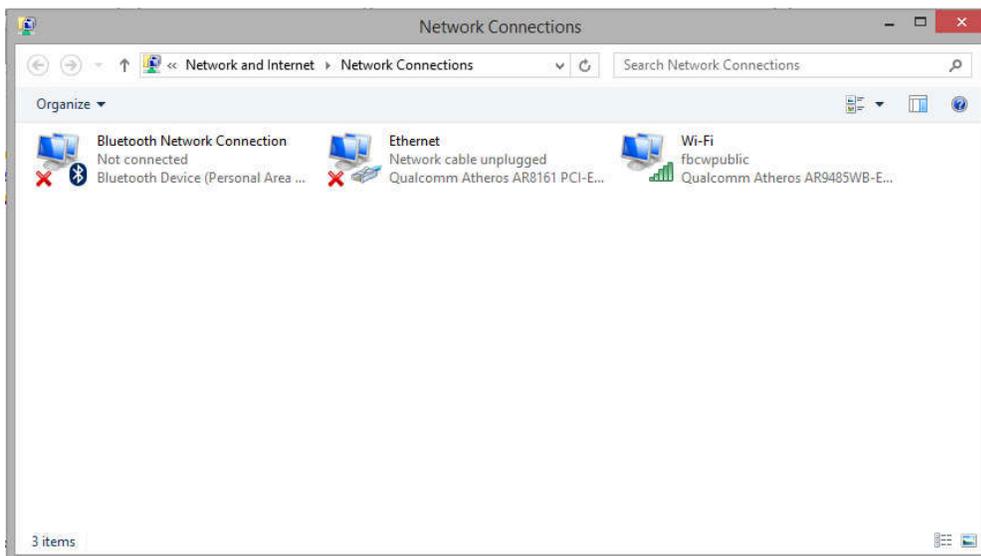
**Option 2:** Use the search window and type “Network and Sharing Center”. When the search function provides choices below, select Network and Sharing Center.



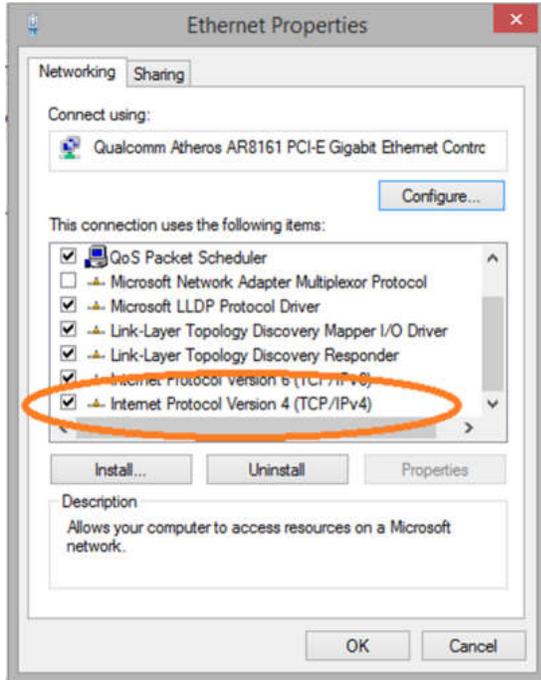
The next page will be as shown below. Select the “Change Adapter Settings”



When you are in the Change Adapter Settings page as shown below, select the LAN adapter that you will use to communicate with the VIP-STREAM-100 II system.



For this example, we will select the middle listing, Qualcomm Atheros LAN Adapter. Double click on the listing. The properties page will open as shown below.

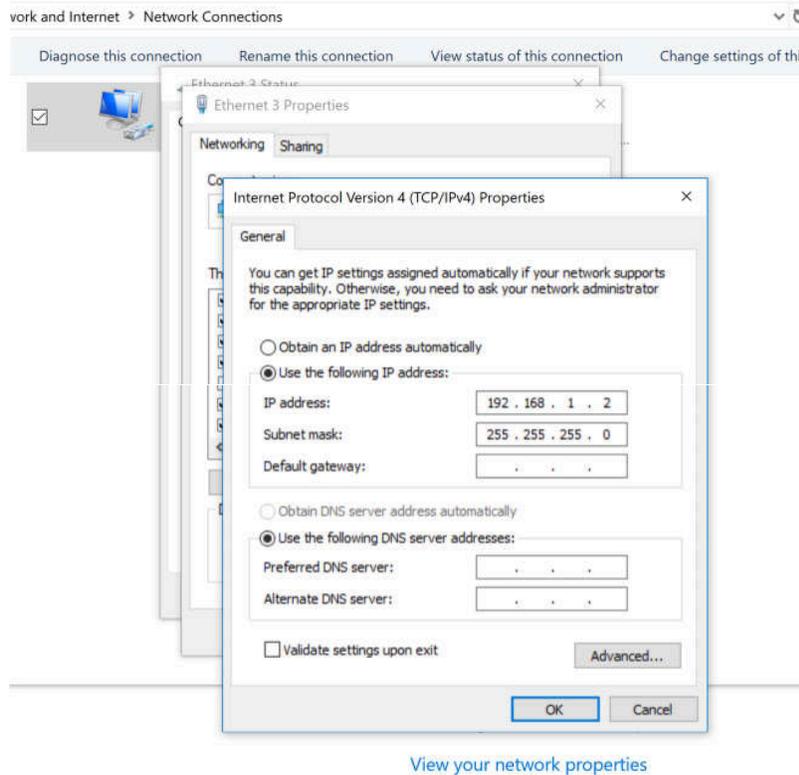


Select "Internet Protocol Version 4 (TCP/IPv4)" by double click on the text.

**Note:** Do not deselect the checkbox or change the selections of any other properties in the menu.

When the window changes to the Properties page for the Internet Protocol Version 4, enter the same IP subnet as the VIP-STREAM-100 II system. The default address of the VIP-STREAM-100 II is 192.168.1.168.

Please see example below of one possible setting to connect to the device. Be careful to not use the same IP address as another device on the network.



**Note:** Performing a factory default of the VIP-STREAM-100 II will set the IP address to static, 192.168.1.168.



## Network switch requirements

The minimum requirements of a network switch for the VIP-STREAM-100 II are:

- 100BaseT Port speeds
- Backplane data rate performance that exceeds the total data rate of your VIP-STREAM-100 II system and total network data load
- Jumbo Frame: recommended setting of 9k, your application may vary.
- IGMP Snooping: enabled

## Network switch recommendations

It is recommended from a system design standpoint that you consider VLAN management to isolate the multicast traffic generated by the transmitters from devices other than the receivers.

## Setting Up a VIP-STREAM-100 II System:

### Connections

#### *Power*

Each VIP-STREAM-100 II transmitter comes with an AC to DC power adapter. We recommend a surge protected outlet to plug the power adapter in to.

#### *Network Category*

The VIP-STREAM-100 II supports standard category RJ45 connectivity. It is recommended to use CAT6a cabling to ensure best performance. Use pre-terminated cables when possible, and use best practices for cables runs.

#### *Video*

The VIP-STREAM-100 II accepts HDMI 1.3 video formats using standard HDMI cables. HDCP 1.3 signals are accepted.

### Encoding

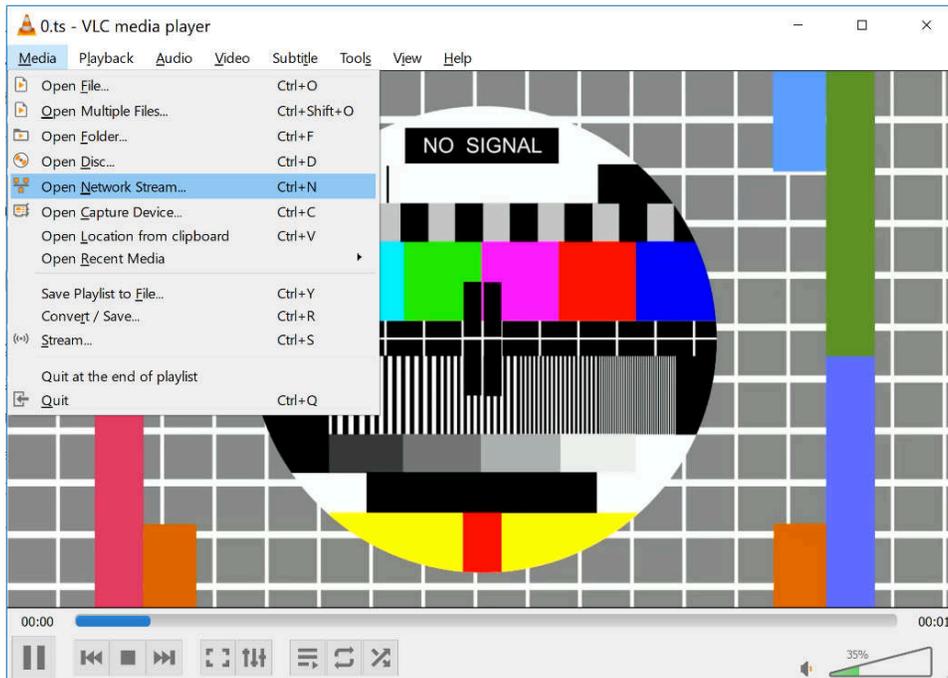
The VIP-STREAM-100 II automatically begins encoding of any compatible signals. If no changes have been made to the settings of the device, the encoded signal will be available at the following URL:

<http://192.168.1.168/0.ts>

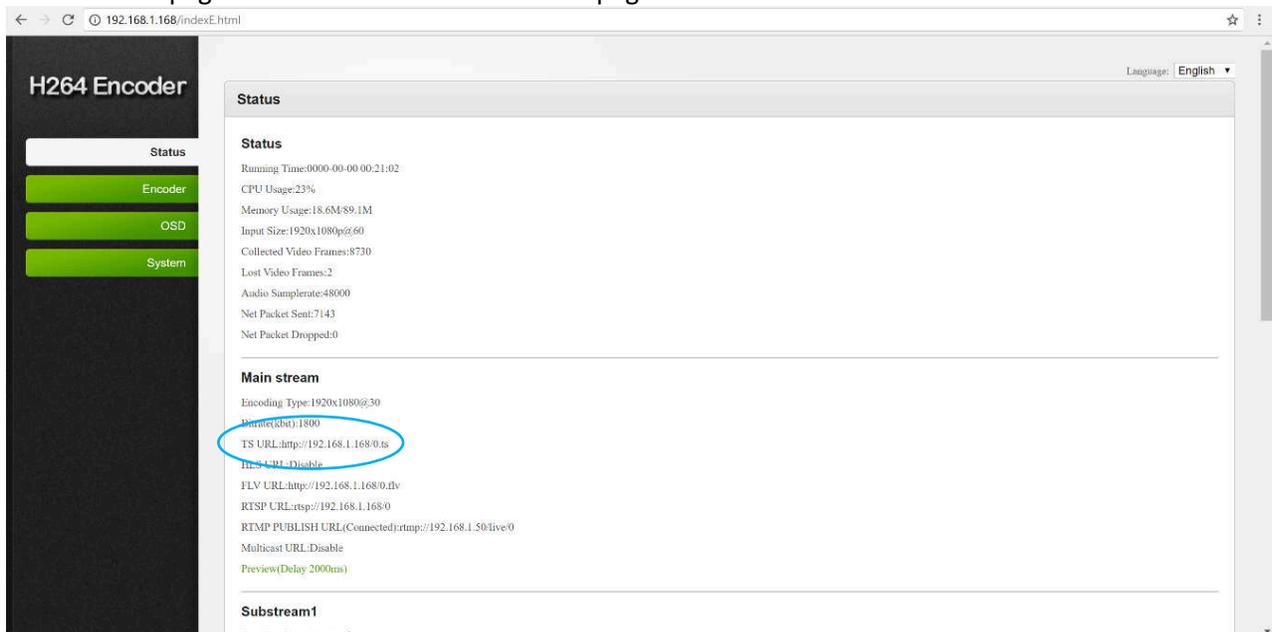
## Decoding/Viewing with VLC Player

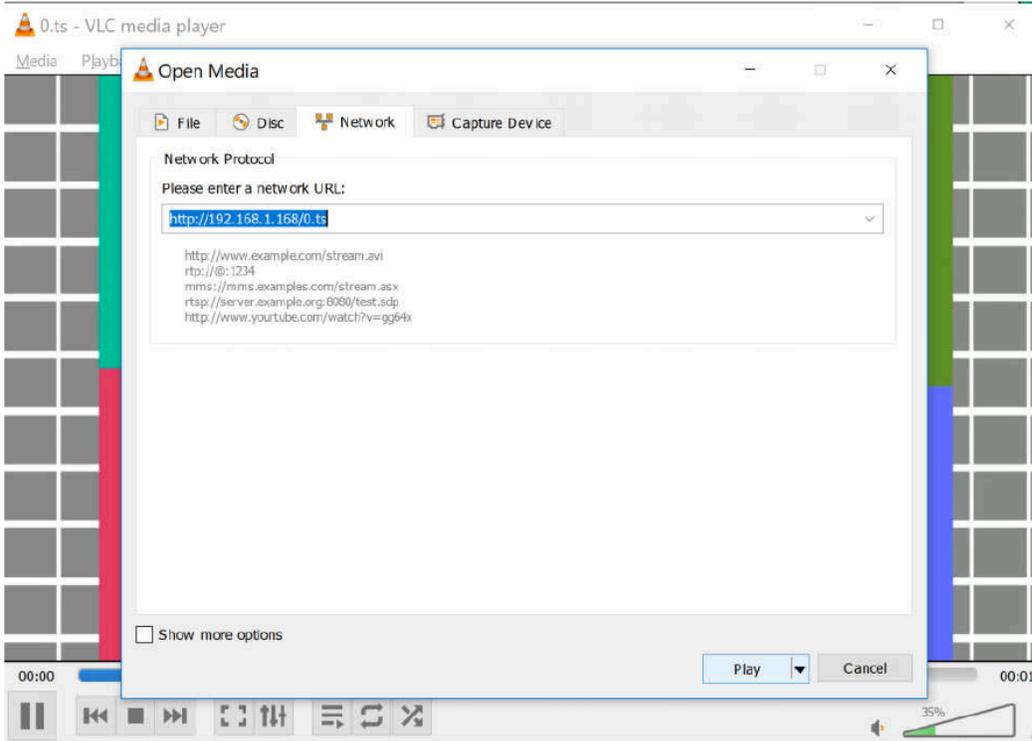
At the time of this manual writing, **VLC 3.0.0** was used for verification.

Open the Media pulldown menu and select 'Open Network Stream'



The 'Open Media' popup window will appear. In the 'Network' tab, enter the TS URL stream URL, found on the Status page of the VIP-STREAM-100 II web page.





Press the 'Play' button. Your stream should now appear.

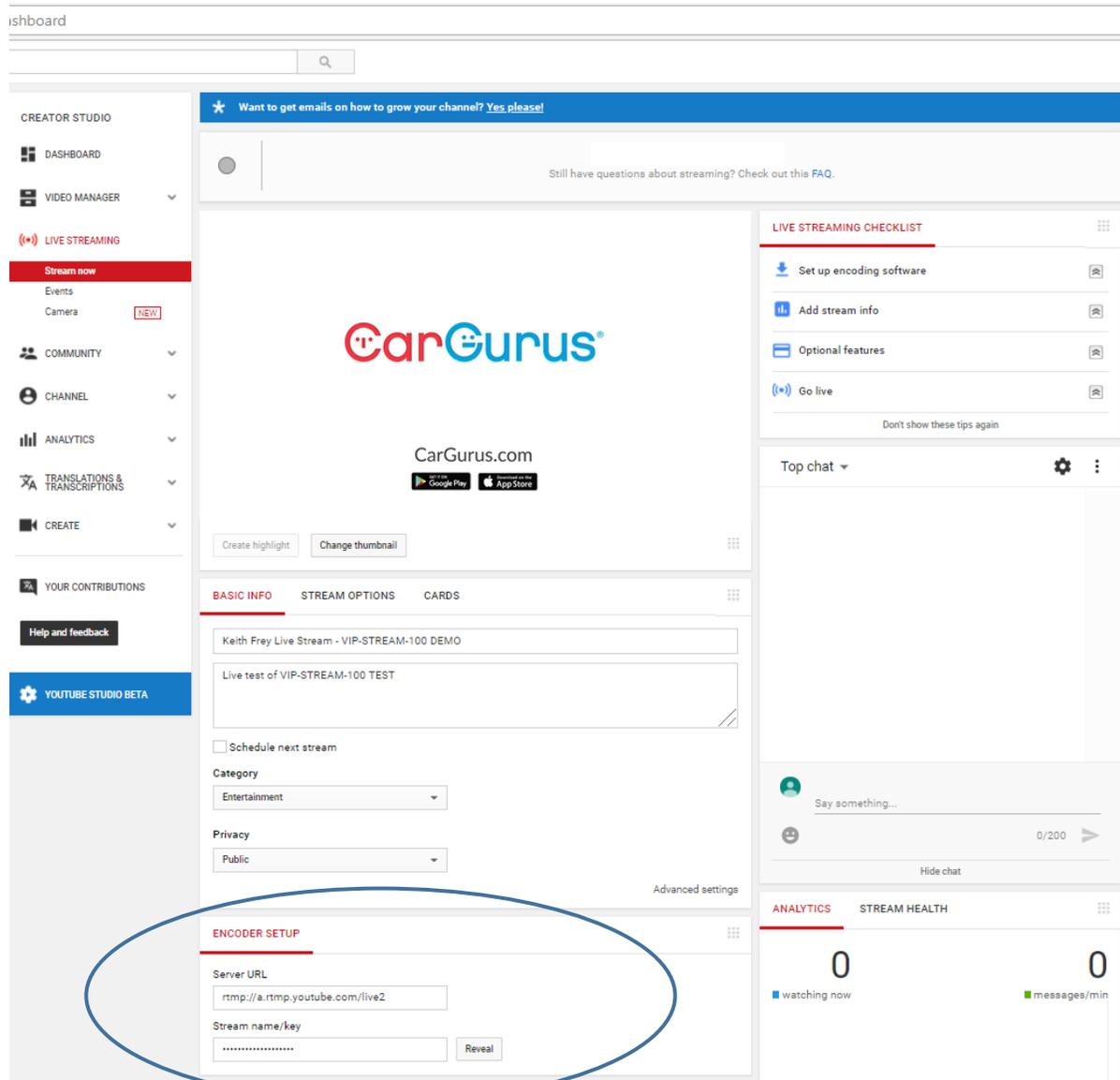
Note: If you 'pause' the stream, VLC player will buffer the stream. Therefore, it will pick up where you paused. If you then pause the actual source, you will not see the effect until the time in the buffered stream where the pause occurred.

## Decoding/Viewing with YouTube Live

Log in to your YouTube Live dashboard: [https://www.youtube.com/live\\_dashboard](https://www.youtube.com/live_dashboard)

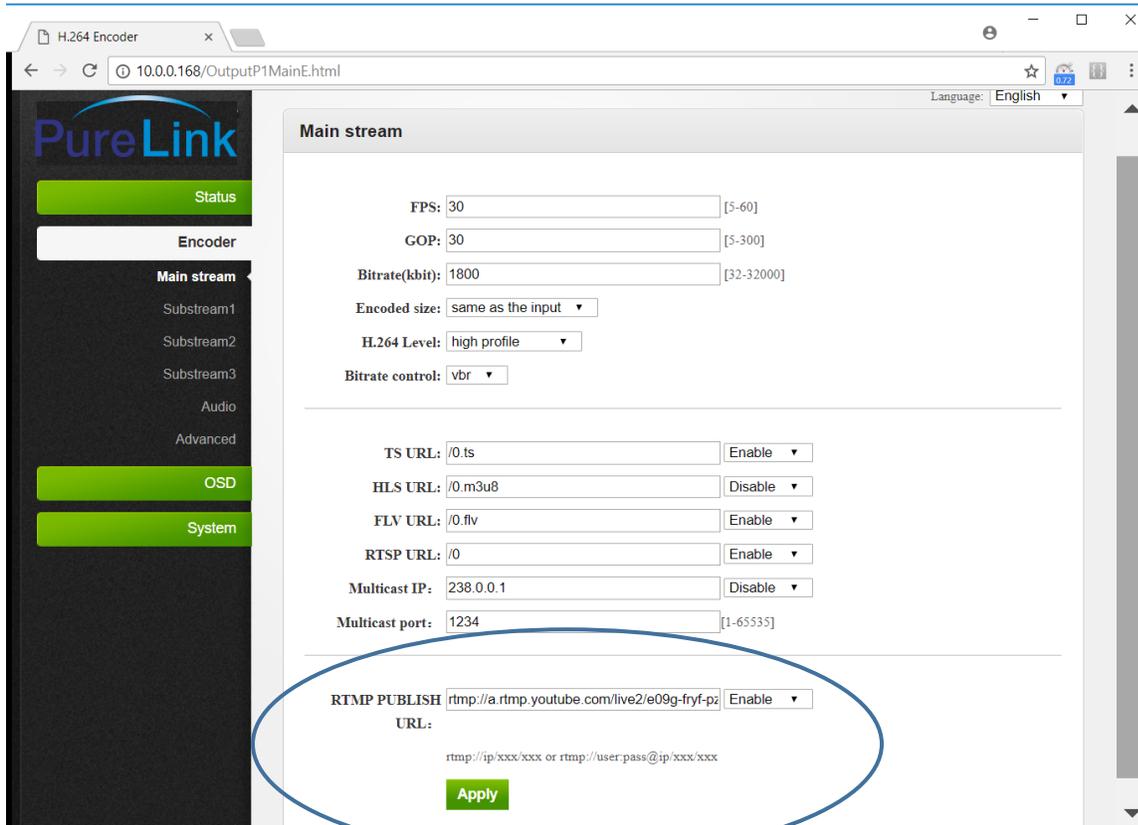
If you have not set up your YouTube Live dashboard, you will need to do that first.

Obtain the Server URL and Stream name/key from your YouTube Live dashboard from the Encoder Setup section. Link the URL and key together using a forward slash between the two. An example would look like: `rtmp://a.rtmp.youtube.com/live2/e09g-fryf-pz34-56mg`

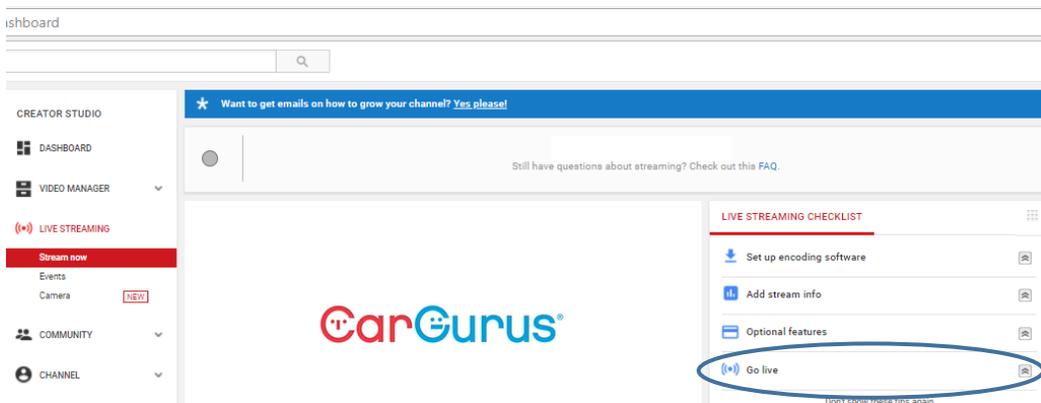


- Select the Encoder tab on the left navigation pane of the VIP-STREAM-100 II main page.

- Select Main stream or any substream from the left navigation.
- Enter the Server URL and key in the RTMP PUBLISH URL text field.
- Select Enable from the pulldown menu to the right.
- Press the Apply button.

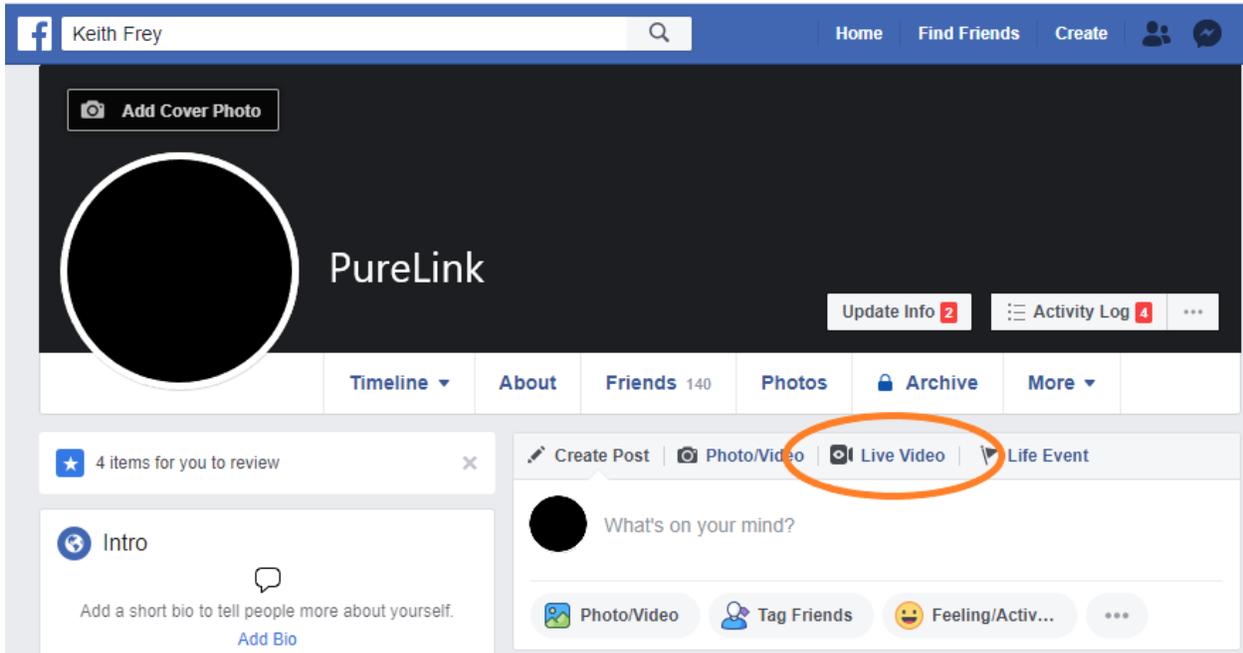


Return to your YouTube Live dashboard, and select the Go Live operation.

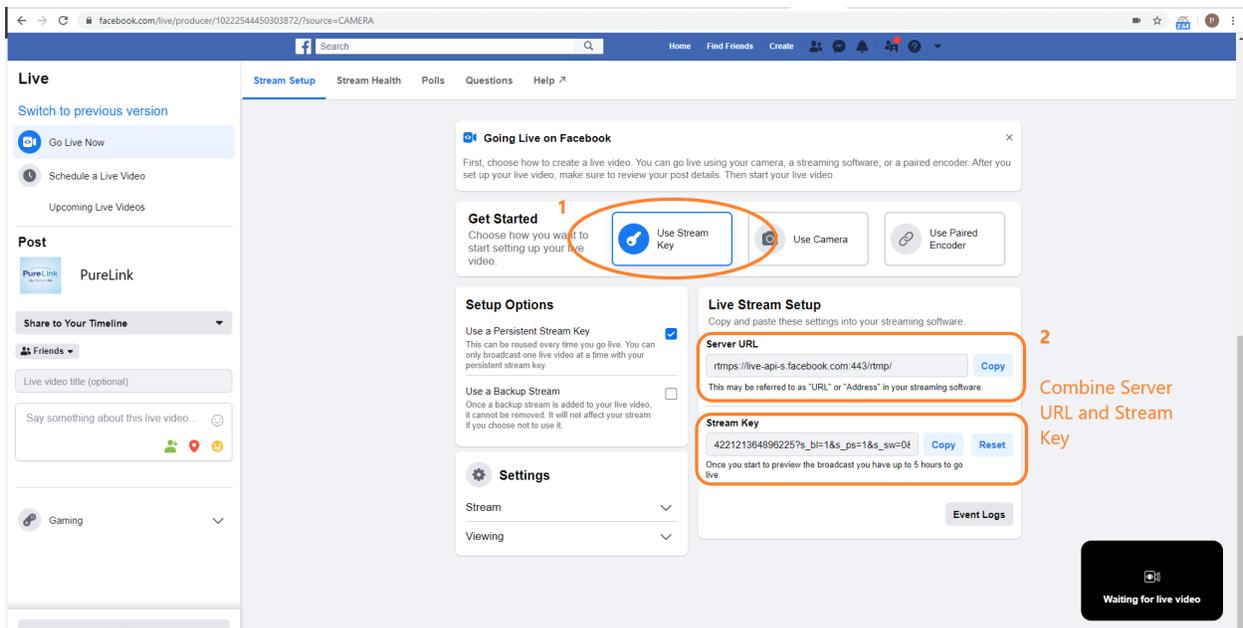


## Decoding/Viewing with Facebook Live

Log in to your Facebook account and select Live Video



The next page will allow you to acquire the Server URL and Stream Key.



- Select the Encoder tab on the left navigation pane of the VIP-STREAM-100 II main page.
- Select Main stream or any sub-stream from the left navigation.
- Enter the Server URL and key in the RTMP PUBLISH URL text field.
- Select Enable from the pulldown menu to the right.
- Press the Apply button.

← → ↻ ⓘ Not secure | 10.0.0.11/OutputP1MainE.html

### PureLink H.265/H.264 Encoder

- Status
- Encoder
- Main stream**
- Substream1
- Substream2
- Substream3
- Video
- Audio
- Advanced

OSD

System

#### Main stream

Encoding Type:  [v]

FPS:  [5-60]

GOP:  [5-300]

Bitrate(kbit):  [32-32000]

Encoded Size:  [v]

H.264 Level:  [v]

Bitrate Control:  [v]

---

TS URL:   [v]

HLS URL:   [v]

FLV URL:   [v]

RTSP URL:   [v]

RTMP URL:   [v]

**1** RTMP(S)/RTSP PUSH URL:   [v]

Multicast IP:   [v]

Multicast Port:  [1-65535]

SRT URL Port:   [v]

SRT PUSH URL:   [v]

SRT Encryption Password:   [v]

**2**

When the VIP-STREAM-100 II is streaming to Facebook, you will see the preview. When you are ready to stream live, enter a description and title in the right pane, and either schedule the stream to start, or select Go Live

**Going Live on Facebook**

First, choose how to create a live video. You can go live using your camera, a streaming software, or a paired encoder. After you set up your live video, make sure to review your post details. Then start your live video.

**Get Started**  
Choose how you want to start setting up your live video.

- Use Stream Key
- Use Camera
- Use Paired Encoder

**Setup Options**

**Use a Persistent Stream Key**   
This can be reused every time you go live. You can only broadcast one live video at a time with your persistent stream key.

**Use a Backup Stream**   
Once a backup stream is added to your live video, it cannot be removed. It will not affect your stream if you choose not to use it.

**Settings**

**Stream**

- End live video if stream stops   
Not recommended for live videos with poor internet connection. You will not be able to reconnect an encoder during your live video. If a backup stream is enabled, you cannot use this function.
- Allow embedding

**Embed Code**

**Live Stream Setup**  
Copy and paste these settings into your streaming software.

**Server URL**  
rtmps://live-api-s.facebook.com:443/rtmp/ [Copy](#)  
This may be referred to as "URL" or "Address" in your streaming software.

**Stream Key**  
4221213648962257s\_bl=1&s\_ps=1&s\_sw=0& [Copy](#) [Reset](#)  
Once you start to preview the broadcast you have up to 5 hours to go live.

[Event Logs](#)

Chat (10)

## Glossary

<b><i>FPS</i></b>	Frames Per Second – common settings are 24fps, 25fps, 30fps, and 60 fps
<b><i>FLV</i></b>	Flash Video streaming utilizing Adobe Flash Player version6 or higher
<b><i>HLS</i></b>	HTTP Live Streaming, found with browsers such as Chrome, Firefox, and Safari
<b><i>GOP</i></b>	Group of Pictures – terminology used when encoding MPEG video
<b><i>Bitrate</i></b>	quantity of bits per second sent from the encoder, in kilobits
<b><i>Encoded Size</i></b>	Horizontal and vertical pixel counts of output image resolution
<b><i>H.264</i></b>	high quality, low bitrate motion-compensation based compression standard
<b><i>Bitrate Control</i></b>	refers to VBR (Variable Bit Rate), or CBR (Constant Bit Rate)
<b><i>CBR</i></b>	Constant Bit Rate, used to save file size when content has similar motion throughout
<b><i>VBR</i></b>	Variable Bit Rate, used vary bit rate dependent on content changes and provides most favorable results.
<b><i>TS</i></b>	Transport Stream, commonly used for audio/video streaming based on MPEG-2
<b><i>RTSP</i></b>	Real Time Streaming Protocol for request communications between media servers and clients
<b><i>Multicast IP</i></b>	IP address for data (audio/video) broadcasting. An audio/video encoder such as the VIP-STREAM-100 II will have both a device IP address (192.168.1.168) and a multicast IP address for broadcasting the audio/video stream (e.g.: 238.0.0.1:1234)
<b><i>RTMP</i></b>	Real Time Messaging Protocol, a TCP based streaming protocol with persistent c connectivity
<b><i>AAC</i></b>	Audio coding standard used by YouTube, Apple, Sony, etc.
<b><i>ONVIF</i></b>	Open Network Video Interface Forum, a standardization of IP based security products
<b><i>G711A</i></b>	A PCM audio companding standard used in telephony



## PureLink™ Three (3) Year Limited Warranty

Dtrovision, LLC. (hereinafter "PureLink") warrants its HDTools™ and PureStream™ branded products (hereinafter "Product") purchased directly from PureLink or Dealer shall be free from defects in workmanship and materials, under normal use and service, for a period of three (3) years on parts and three (3) years on labor. Any repaired or replaced equipment related to Product shall be covered only under the remaining portion of the warranty. This warranty has no relationship to and exists independently of any warranty offered by Dealer. This warranty is a limited warranty and gives you specific legal rights. You may also have other rights which vary from state to state.

### TERMS & CONDITIONS

PureLink shall repair or replace the Product if it develops a material fault during the period of warranty, on condition that i) the Product has only been subject to normal use in a domestic or commercial environment in a manner consistent with its specification and functionality, ii) the Product has been cared for reasonably and only subjected to reasonable wear and tear, iii) the defect has not been caused by willful or negligent abuse or neglect, or any accident or improper installation procedure, iv) the serial number of the Product has not been altered or removed.

This warranty only applies to the original purchaser, and shall be the exclusive remedy to the original purchaser. PureLink shall not be liable for any damages whatsoever caused by Product or the failure of Product to perform, including incidental or consequential damages. PureLink shall not be liable for any claim made by a third party or made by the purchaser for a third party.

Except as expressly set forth in this warranty, PureLink makes no other warranties, expressed or implied, including any implied warranties of merchantability and fitness for a particular purpose. PureLink expressly disclaims all warranties not satisfied in this limited warranty. Any implied warranties that may be imposed by law are limited to the terms of this limited warranty. This warranty statement supersedes all previous warranties.

### WARRANTY/RETURNS/REPAIRS/EXCHANGES

No merchandise may be returned without prior authorization from PureLink, and a Return Materials Authorization (RMA) number. Failure to comply with these conditions will result in rejection of the returned merchandise.

Any warranty service on Products must be arranged through Dealer. Authorized returns must be shipped freight prepaid and fully insured to PureLink, Ramsey, NJ USA, with the RMA number clearly marked on the outside of all shipping boxes and containers. PureLink reserves the right at its sole discretion to refuse any shipments arriving freight collect or without an RMA number. Any authorized returned merchandise must be accompanied by a note describing the reason for return, along with contact information including name, phone number, return mailing and shipping addresses, e-mail address, and RMA number.

On any products returned and accepted with an RMA number, return freight charges following repair of items under warranty shall be paid by PureLink, shipping by the standard ground carrier of its choice.

### ADVANCE WARRANTY REPLACEMENTS



PureLink's advance replacement service offers a Replacement Unit upon request - free of charge for eligible products purchased less than one (1) year of the warranty claim. Products purchased more than one (1) year prior to the warranty claim do not qualify for advance replacement services.

Advance replacement requests must be validated by a member of PureLink's Technical Support Team. Replacement units may be new or refurbished and is subject to availability. PureLink is responsible for shipping the Replacement Unit to your designated location by standard ground service. All other shipping methods will be responsibility of the Dealer.

**Original Unit Return** – the Original Unit must be returned within thirty (30) calendar days of the return authorization date. Failure to return the Original Unit within this period will be subject to a minimum 15% re-stocking fee. Dealer is solely responsible for the shipping of the Original Unit to PureLink.

### TO MAKE A WARRANTY CLAIM

To make a warranty claim, promptly notify PureLink within the warranty periods described above by calling PureLink's Technical Support Department at 1-201-488-3232. PureLink, in its sole discretion, will determine what action, if any, is required under this warranty.

Most problems can be corrected over the phone through close cooperation between Customer and a PureLink technician. To better enable PureLink to address a warranty claim, please have the Product's serial and model numbers. If PureLink, in its sole discretion, determines that an on-site visit or other remedial action is necessary, PureLink may send a representative to Customer's site.

### CUSTOMER SERVICE

Technical support inquiries can be submitted electronically at [www.purelinkav.com/tickets](http://www.purelinkav.com/tickets). For immediate assistance please contact PureLink's Customer Care Team at +1 (201) 488-3232