



# VECASTER PRO SERIES H264/H265 ENCODER

USER MANUAL

## VECASTER PRO SERIES H264/H265 ENCODER

### PRODUCT SPECS & FEATURES

**Power - 12v/DC (12v/2A 5W)**

**Encoding - Latest H.264/H265 High Efficiency Encoding Technology (Depending on Model) HD 720P/1080I/1080P / 4K UltraHD (Depending on Model) @ 60 Hz Ultra Low Latency. Standard Baseline/Main/High Profile Support. HDMI 2.0 and HDCP compliant.**

**Supports ACC/Mpeg1L2 Audio**

**CBR/VBR (constant & Variable) Bitrates option available with up to 12mpbs bitrate.**

**Two Stream Encoders for support of multiple styles of formats and encoding preferences to different servers.**

**RTMP, HLS, HTTP, UDP, RTSP**

**Ability to Distribute any 720p/1080P/4K HDMI 2.0 UHD Video DIRECTLY to unlimited Smart TVs, Mobile Phones, Tablets, PCs, IP Box**

**IPTV over LAN - Wi-Fi – Internet**

**Plays Directly on Any Smart TV - Add More VeCASTER units for More Channels  
Change Channels on TV via TV Remote Control in your SmartTV IPTV app.**

**Built-In Gigabit Server to stream directly to hundreds of simultaneous Player  
-Can also stream to YouTube - Wowza - Akamai and others**

**Dual Simultaneous Encoders and scalers to create two versions of the same channel  
-optimize for TV play and mobile Play simultaneously**

**5 CG Logo Generators**

**Modular-Expandable-Reliable**



## POWERING THE DEVICE. – QUICK GUIDIE

- a) Connect your included Power adapter the unit.
- b) Once the unit is powered on insert a valid HDMI Video Signal into the HDMI port > The On-air LED on the back will start blinking
- c) Set your computer to a static IP as 192.168.1.100 ( see below on how to set your local static IP connection)
- d) Connect your PC ETHERNET PORT to the VECASTER ETHERNET PORT using a patch cord
- e) Run VLC VideoLan video playback software ( [www.videolan.org](http://www.videolan.org) ) On VLC > MEDIA > OPEN NETWORK STREAM > <http://192.168.1.168/0.ts>
- f) You should now see the video playing on VLC

**NOTE:** If the above is not working, please check all connections, Network Settings, and ensure your video source is working. You could also try with another pc, or reset the VeCASTER unit by pressing the Reset button for 10 seconds on the rear panel of the unit

## MANUALS & TECH SUPPORT

Latest Manuals & Software are always available on our specific website [www.quickinstallnow.com](http://www.quickinstallnow.com) to access, use the 3 letters prefix + the UPC number on the serial number label on the product. You can also scan the QR Code on the label to access directly.

Free Unlimited Tech support over the phone is always available Mon-Fri 9 am / 4 pm EST US.

For troubleshooting or questions please open a Ticket on our site [pvisupport.com](http://pvisupport.com)

Your Satisfaction is top priority and most important for us.

## LOGIN TO THE UNIT

The FACTORY DEFAULT IP address is 192.168.1.168

The Login is:

User = admin

Password = admin

You can reset the VECASTER by pressing for 10 seconds the reset button located on the rear panel to access, make sure your computer is set to a STATIC IP ADDRESS as 192.168.0.100 See the PC SETTINGS instruction below in this manual

## PARAMETERS & CUSTOMIZATIONS

Each unit is ready to work plug n play by default above. You can also customize the unit parameters to fit your application and needs. The unit comes with 2 independent Video Encoder Engines, each capable to output 5 different protocols ( RTMP / HTTP / RTSP / UDP / HLS ), Video Scaling, HEVC H.265 or H264 video formats depending on your model, AAC or MP3 Audio Formats, FIVE CG Logo Generators, frame rate controls, etc.

## DIRECT STREAMING & REPEATER SERVERS

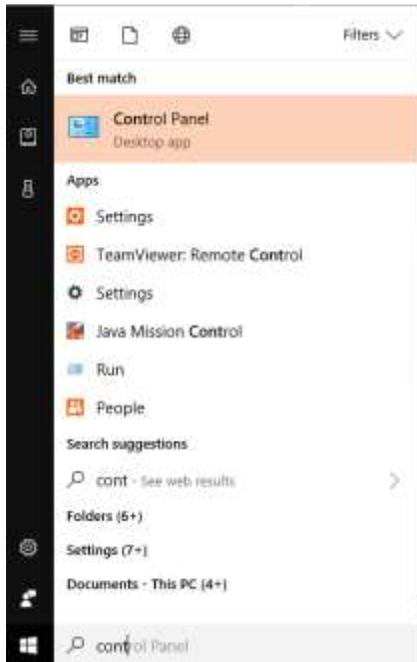
Each unit has a built-in 1 Gigabit streaming server, so you can stream direct-to-internet to hundreds of players at the same time (limit depends from the selected bitrate and the available bandwidth from your internet service provider) there is no need for any additional hardware but it is suggested to run a Multicast IGMP enabled switch if running multiple units. Should you need to do a wider distribution over the Internet, you can always point the stream / receive the stream over one or multiple internet servers such as YouTube or similar, to receive / repeat / redistribute your stream/s to millions of people.

## INSTALLING MULTIPLE UNITS

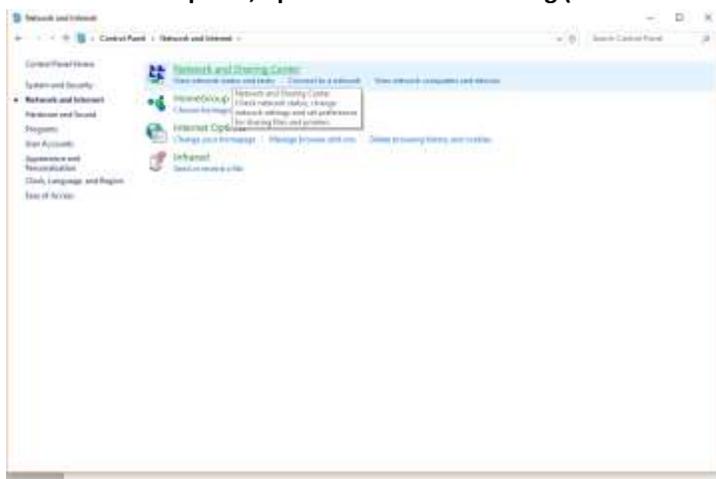
To install multiple units on the same network, make sure to CHANGE the IP address of each unit BEFORE you connect them to the same network, so there will be no IP Conflicts. Point your web browser to the IP address of the unit (default is 192.168.1.168) Login to the unit, click NETWORK on the bottom, change the NETWORK SETTINGS as needed by your application. As example you can set your units to IP addresses 192.168.1.168 169 170 171 ... Write down these values, or put a sticker on each unit with the new assigned IP address so it will be easy to login to the unit in future without the need to reset it. Depending on your setup it's suggested to use a Multicast IGMP enabled switch to help with the traffic.

## PVI - PC CONNECTION GUIDE

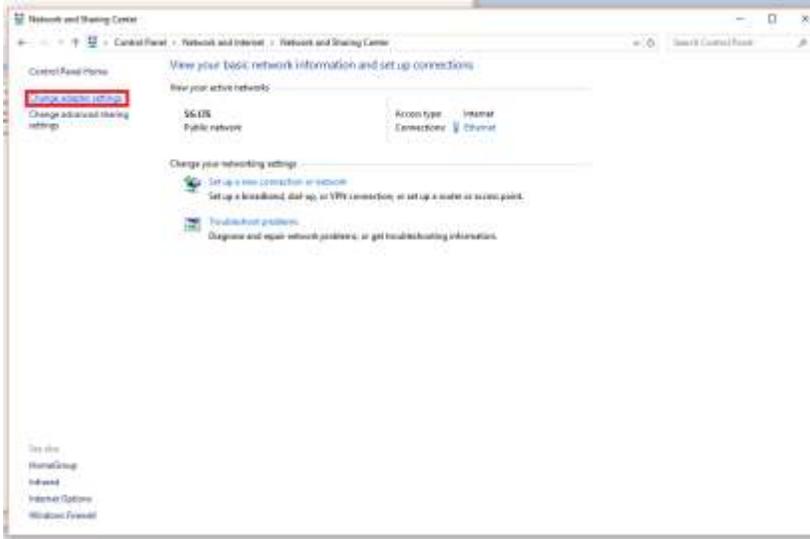
On Windows open your control panel



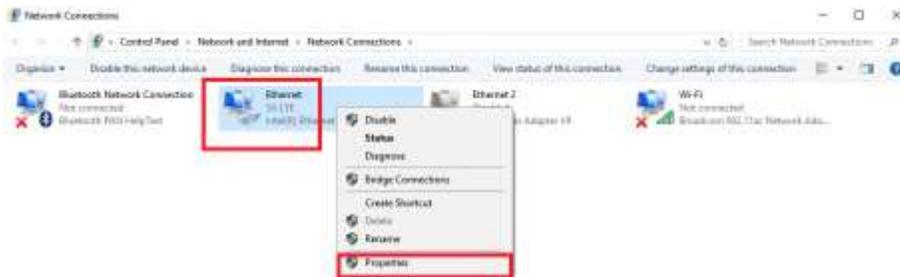
Once on control panel, open Network and Sharing (Network and Internet for Windows 8 and above)



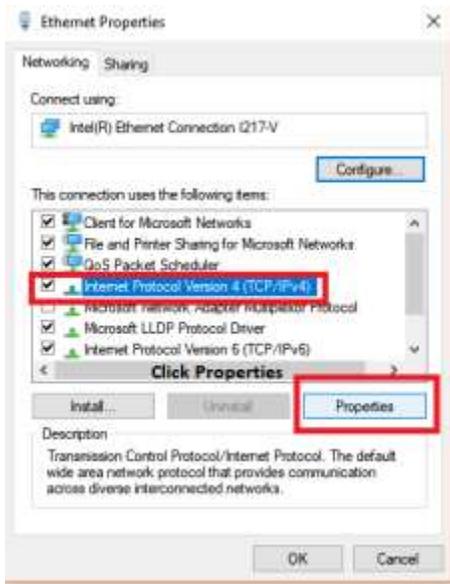
Once you have Network and Sharing Center open, Click on “Change adapter settings.”



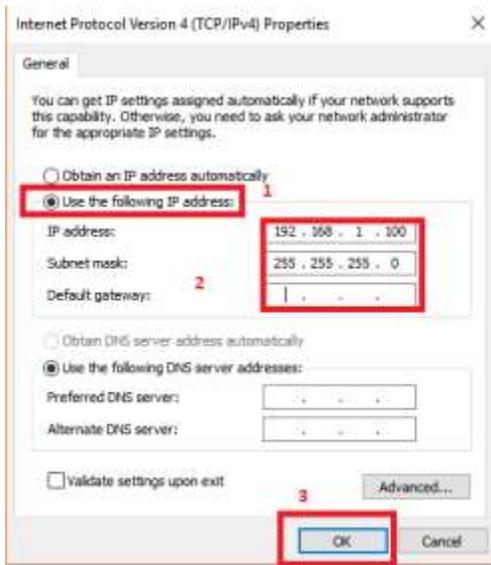
Right Click on your Local Ethernet connection and click on “properties.”



Once the Ethernet Properties are open click on, "Internet Protocol Version 4(TCP/IPv4)," and click on, "Properties."



In the Properties change your IP address from auto to Static and Change the IP address to the required setting to connect to your unit which will be listed in the manual of your Product. Click ok once you are done and close everything. You are now ready to connect to the Web interface of your Unit.



## WEB INTERFACE

Once you have logged into the unit you will see the STATUS page. This will display all your enabled formats for all streams and Video Input resolution as well as status of the current unit.



## NAVIGATION PANEL

This is at the bottom of the web interface. Here you can change between your different streams, Network settings, Audio settings, and Advance system menu. Your main focus would be on MAIN STREAM and NETWORK.



## MAIN STREAM

Here you can set your settings for the Main Stream. You can enable and disable different formats you wish to use as well as Bitrate, FPS, Encoding Size, and Compression Profile. You may adjust these settings to your needs. Below are our recommend defaults. Please set your unit all up and then power cycle the unit to ensure the settings take effect. The Same settings can be done in the Other Streams but not nessarcy unless you wish to use a specific format and require special settings such as lower bitrate or frames for that specific application.

Main stream

FPS:	<input type="text" value="30"/>	[5-60]	<p style="color: red; font-weight: bold; margin: 0;">These are the Recommend Balanced settings for best performance and Bandwith usage</p>
GOP:	<input type="text" value="5"/>	[5-300]	
Bitrate(kbit/s):	<input type="text" value="8000"/>	[32-32000]	
Encoded size:	<input type="text" value="same as the input"/>		
H.264 Level:	<input type="text" value="high profile"/>		
Bitrate control:	<input type="text" value="vbr"/>		
MIN_QP:	<input type="text" value="5"/>	[1-38]	
MAX_QP:	<input type="text" value="42"/>	[MIN_QP-50]	
Video Only:	<input type="text" value="Disable"/>		
TS once pack:	<input type="text" value="7"/>	[3-128]	
TS URL:	<input type="text" value="/0.ts"/>	Enable <input type="checkbox"/>	
HLS URL:	<input type="text" value="/0.m3u8"/>	Disable <input type="checkbox"/>	
FLV URL:	<input type="text" value="/0.flv"/>	Enable <input type="checkbox"/>	
RTSP URL:	<input type="text" value="/0"/>	Enable <input type="checkbox"/>	
Multicast IP:	<input type="text" value="238.0.0.1"/>	Disable <input type="checkbox"/>	
Multicast port:	<input type="text" value="1234"/>	[1-65535]	
RTMP PUBLISH URL:	<input type="text" value="rtmp://192.168.1.50/live/0"/>	Disable <input type="checkbox"/>	

rtmp://ip/xxx/xxx or rtmp://user:pass@ip/xxx/xxx

**NOTE: If the unit starts slowing down or the CPU usage is too high under the status page, please disable any formats you are not using or Factory Reset the Unit under the Systems Tab.**

## ON SCREEN DISPLAY (OSD)

Here you can set your Logo to display (overlay) over the incoming HDMI video such as your company logo or Text. The unit has 5 different CG Generators giving you many options from many different logos to text.

The logo requires to be named logo1.bmp. It must be a BMP format picture. Depending on the zone you wish to use the logo results in the required name.

Example: Logo1.bmp – ZONE 1 Logo2.bmp – ZONE 2 Logo3.bmp – ZONE 3 Logo4.bmp – ZONE 4

You can use both Pictures and Text at the same time.

## TEXT SETTINGS:

**TEXT X:** [0-1920] – Left and Right position of the Text

**TEXT Y:** [0-1080] – Up and down position of the Text

**FONT:** [8-72] – Size of Text

**ALPHA:** Opacity of the Text [0-128]

**COLOR:** Color of the Text

**BG:** Background color of the text if you wish

**TEXT:** type the text here that you wish to display

### PICTURE SETTINGS:

**Picture:** Disable/Enable

**Picture X:** [0-1920] – Left and Right position of the Picture

**Picture Y:** [0-1080] – Up and down position of the Picture

**ALPHA:** Opacity of the Picture [0-128]

## NETWORK

Here you can adjust the network settings to match your needs of your specific network or switch.

The screenshot displays a network configuration interface with three main sections: Internet access, DNS, and PORT. Each section has a blue header bar with the section name in white text.

- Internet access:** Contains a DHCP dropdown menu set to "Disable", and input fields for IP (192.168.1.168), Netmask (255.255.255.0), Gateway (192.168.1.1), and MAC (00:13:14:15:61:C5).
- DNS:** Contains input fields for DNS1 (81.139.2.69) and DNS2 (8.8.8.8).
- PORT:** Contains input fields for HTTP Port (8080) and RTSP Port (8554), both with a range indicator [1-65500]. A "Set up" button is located at the bottom of this section.

## AUDIO ENCODING SETTINGS

Here you can adjust your Audio Format and Volume for the Streams to suit your needs. The settings by default work just fine.

Audio encoding settings

### Audio encoder

Audio Input: HDMI

Samplerate: 44100

Encoder: AAC

Bitrate: 128000 [48000~256000]

Analog Vol: 10 [-80~80]

Set up

### ONVIF audio

G711A Over RTSP: Disable

Set up

## SYSTEM – ADVANCE

Here you can change the Advance settings for the encoder. At the bottom of the page you can soft-reboot the device as well as Factory reset the unit if required. You can also set up an Automatic Restart of the unit to ensure the unit's stream restarts and refreshes itself daily during off-hours. This is optional.

**NOTE:** Please don't change these settings unless you know what you are doing or require a specific setting for your application such as a different Multicast Type (UDP/RTP). Changing these settings could result in unwanted effects to your video Stream.

Advanced

TS muxer:	Compatible with FFmpeg <input type="text" value="Compatible with FFmpeg"/>		
Net Drop Threshold:	<input type="text" value="5000"/>	[50-50000]	
TS once pack:	<input type="text" value="7"/>	[3-128]	
ts_transport_stream_id:	<input type="text" value="101"/>	[1-65535]	
ts_pmt_start_pid:	<input type="text" value="480"/>	[16-7986]	
ts_start_pid:	<input type="text" value="481"/>	[32-3940]	
ts_tables_version:	<input type="text" value="6"/>	[0-31]	
ts_service_name:	<input type="text" value="Live"/>		
ts_service_provider:	<input type="text" value="Encoder"/>		
TS Empty Packet:	<input type="text" value="No Insert"/>		
TS password enable:	<input type="text" value="Disable"/>		
Vmix Compatible:	<input type="text" value="Disable"/>		
TS OVER RTSP:	<input type="text" value="ES"/>		
Multicast type:	<input type="text" value="UDP"/>		
Slice split enable:	<input type="text" value="Disable"/>		
Slice size:	<input type="text" value="1024"/>	[128-65535]	
MIN_QP:	<input type="text" value="5"/>	[1-35]	
MAX_QP:	<input type="text" value="42"/>	(MIN_QP-50)	

DEFAULT SETTINGS

### Schedule restart

Restart enable:

Restart time:  Minute

Restart left:  Minute

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### Upgrade settings

Upgrade:   (Upgrade file name is up.rar.Please don't upload by different people at the same time,don't power off or refresh the page during upload.)

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### System settings

**TECH SUPPORT**

Please read carefully all this manual as it covers ALL and EVERY aspect to set this product as per your needs, using pictures and examples.

Should you need any additional support please go to [pvisupport.com](http://pvisupport.com) and open a quick ticket.

**Remote locations that you require support please can Schedule a time at least 24-48 hours in advance that works best for everyone.**

The free tech support is active MON-FRI 10 AM – 4 PM US EST TIME Tickets posted out from this time window or on Saturdays Sundays and US/FL holidays days are responded ASAP the next following business day

If you need to check your configuration, you will be asked to provide a TEAMVIEWER ID and PASS so our engineers will connect shortly and help you to trouble shoot and set your system together with you. Help on settings is not possible over the phone nor in other ways but the TeamViewer. You can download and install a copy of TEAMVIEWER **Version 11** from [teamviewer.com](http://teamviewer.com) or we can provide you a temporarily access link by opening a Ticket and requesting support.

**END**