

# VeCOAX-*PRO*<sub>4</sub>

Lowest Cost Per HD Channel

## Multi-Channel FULL HD Digital Video Modulators



Distribute **Four** HDMI HD Video Signals to TVs via the existing antenna coax cables with perfect original quality

- ✓ Quad Channel Full HD HDMI digital RF Modulator
- ✓ Quad independent UNIVERSAL HDMI inputs, digital sound and Picture quality
- ✓ Quad Channels out mode, one per video, top quality and easy recall on TVs
- ✓ Ultra Low Latency – almost no delay from inputs to TV screens
- ✓ Also available with HD-SDI, HD Component, Composite, VGA, DVI, or Mixed Inputs
- ✓ Silent & Cold operation – Installs Anywhere !
- ✓ RF out for DVB-T – DVB-C – US Clear QAM – ATSC - ISDB-T
- ✓ Also IPTV RTP/UDP selectable SPTS out to watch on WIFI & Lan
- ✓ All Accessories are included, Rack Ears and Video Cables
- ✓ For professional 24/7 Non stop operation
- ✓ **Breakthrough Price & 5 Years Warranty – totally made in USA**



# Your HD Signals Anywhere – Simple & Easy



## Why VeCoax-PRO 4 is the solution ?

*VeCOAX-PRO 4 is the perfect, final and affordable solution to distribute Quality Full-HD Multi-Video to unlimited standard HD Televisions without requiring any special adapter on each TV nor rewiring with new cables, but using the standard antenna coax cable.*

### Simple Distribution via the Antenna Cable

Based on the DVB/ATSC Broadcasting technologies, the VeCoax-PRO4 converts FOUR independent HDMI videos and stereo or surround sound into a real digital RF frequency you can inject straight to the existing cable network or broadcast on-air, so any HD TVs connected to the same coax network or within the coverage area will receive it as it would be just another FOUR standard broadcasting programs. Each HDMI input is independent and can operate at the same or different resolution from the others.

### True HD Full-Quality on all your HD TVs

VeCOAX-PRO 4 does not compromise with your quality of picture, thanks to its broadcast-grade processors that captures and distribute your Full-HD contents with almost no-delay and no flaws, perfect on Sports, High Motion Video, Text Crawls in Digital Signage, and any other content.

### Multiple Programs

VeCOAX –PRO 4 RF output can be set to any VHF or UHF channel, with selectable world-wide standards, coexisting with any other RF and channels already on the same Coax.

Multiple units can be used to broadcast up to the wanted number of HDTV programs through the same Coax Cable to all your TVs.

### Connects to any Video Source

VeCOAX-PRO 4 is compatible to any DVI and HDMI video sources. HDMI inputs makes this converter suitable for pro applications where perfectness of HD Picture Quality is most wanted.

### Ultra Low Latency

VeCOAX-PRO 4 encoding takes only 50 milliseconds, almost nothing, and when connected to regular TVs via the antenna cables, the total latency including the TV buffering is around 200 milliseconds, almost real time like a matrix switcher. This makes the PRO4 perfect also for any live application where picture on the screens must be at the same time with the video source, and in perfect lips-sync with external speakers

## At a Glance

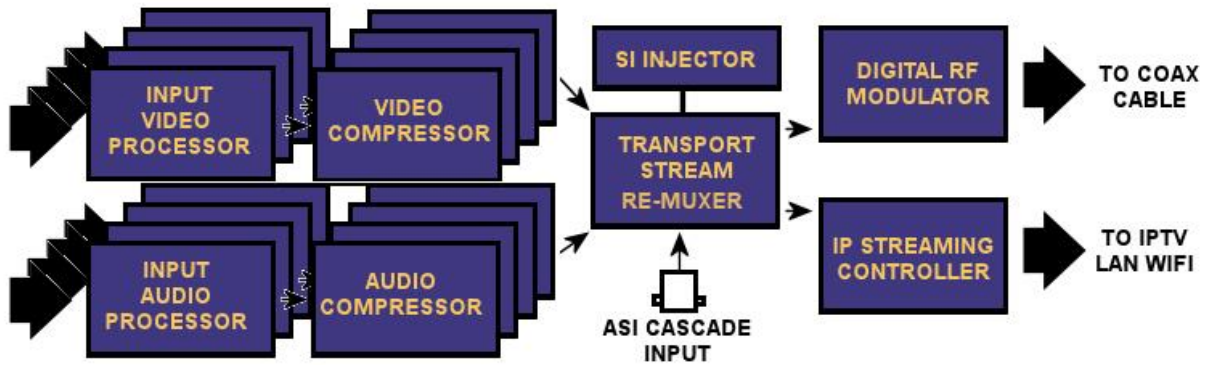
- ✓ **FOUR** HDMI inputs
- ✓ **1080 / 720 Full HD**
- ✓ **Rack Mount & Desktop**
- ✓ **Noiseless & Cold operation**
- ✓ **Pro Connectors & Components for Non-Stop operations**
- ✓ **Available Versions for DVB-T / DVB-C / US QAM / ATSC / ISDBT RF Output**
- ✓ **VHF/UHF out with LCN/VCT**
- ✓ **RF Mix IN / RF Mixed out**
- ✓ **ASI in / out with remux**
- ✓ **Simultaneous IPTV out**
- ✓ **Services Descriptors editor**
- ✓ **Control via LCD/Keyboard**
- ✓ **Also Remote Control NMS**
- ✓ **Perfect Full-HD Picture quality, same as the original**
- ✓ **Mix to the existing antenna coax together with other Adjacent TV signals**
- ✓ **5 Years of warranty**
- ✓ **Breakthrough price and Quality**

# Perfect Integration & Compatibility



## 4x

4x HDMI HD INPUTS :  
4x Stereo/Surround Audio  
4x 1080i / 720p HD video



## Save on Cables & Adapters

*VeCOAX-PRO 4 works sharing the existing antenna coax cables to all of your HD TVs, so there is no need to wire new cables. Moreover, the VeCOAX-PRO 4 can be directly received by any HD TV without the need of any local additional adapter and you'll be able to switch between regular programs and the VeCOAX ones seamless using the standard TV's remote controls, avoiding multiple Remotes. Where needed, our optional IR Infra-red over coax extender kit allows you to control all the Master room video sources and players from any room, using simple and cost effective industry standard programmable remote controls or tablets.*

### Home Entertainment

VeCOAX-PRO 4 is the perfect solution to distribute all your HD Video Sources from your Master room to all your TVs in all other rooms, without the need to duplicate the AV equipment to each room. Our IR Infra-Red Extender option allows infrared remote control feedback from any room to the master AV system via the same Coax Cable.



### Hotel TV

VeCOAX-PRO 4 is the ideal choice to create unlimited HDTV channels in any Hotel Environment and distribute these to standard HD TVs in every room via the existing Coax Cable. Digital Signage, Info Channels, Meeting channels, and any other video taken from any HD / SD Video source.



### Unlimited Applications :

HD entertainment, HD surveillance, Private Homes, Condominiums, Sport Bars, Restaurants, Lounges, Clubs, Discos, Resorts, Hotels, Malls, Convention Centers, Race Tracks, Hospitals, Airports, Theaters, Live Events, Motor Yachts, Cruise Ships, Corporates, Schools, Campus, In Store TV, HDTV Distribution, Info Channels and Digital Signage, Low Delay full HD Monitoring, Coax Broadcasting, and yours...



## Key Benefits

- ✓ 4 Channels in a very Compact & silent op. unit
- ✓ No Needs to wire new cables as it shares the existing antenna coax cables, easy
- ✓ Direct reception on any Existing HD TV without the need of any extra adapter
- ✓ Drives up to 1600 Feet (500+ meters) of existing coax cables without the need to Re-Amplify.
- ✓ HDMI input for TRUE FULL DIGITAL Full HD picture quality and resolution
- ✓ Pro Connectors & Components for Non-Stop operations
- ✓ 5 YEARS of warranty
- ✓ Expandable with Multiple units chaining
- ✓ Free World-Class Support

# Perfect choice, Affordable & Built To Last



The VeCOAX-PRO 4 is available with different RF output standards for every world-wide country, and is compatible to any HD TUNER TV set. It connects in minutes to your HDMI video sources and the existing Antenna Coax cable distribution system so the created HD programs can be received by any connected HD TV, just rescanning the frequencies, easy.

**5 YEARS of warranty through our World-Class Free Tech Support centers in USA and Europe**

## Video Input

### Standard Video Input Interfaces

#### HDMI

- 4X HDMI 1.4 Full HD Input 36-bit color depth
- Broadcasting industry standard resolution 1080i / 720P ( please note most TVs does not support 1080p when receiving from the Antenna HD tuner ) 59,94 / 50 Frames/Fields
- HDMI Audio Stereo/Surround
- Number of inputs depends by model

#### Computer DVI

- DVI Digital via DVI-HDMI Cable
- Set your PC Resolution to 1080i or 720p
- 59,94 / 50 Frames/Fields
- Audio by using external embedder

## Audio Input

### Standard Audio Input Interface

#### HDMI

- HDMI embedded
- Audio Stereo/Surround

## Audio Encoder

### Simultaneous Audio Encoding

- **FOUR** independent / simultaneous audio encoders, one per each HDMI input

### Audio Encoding profiles per each channel

- Mpeg-1 Layer II – All Modes
- AAC-LC AAC-HE ( option )
- Surround pass-through

## Video Encoders

### Simultaneous HD Encoding

- **FOUR** independent / simultaneous encoders, Full Frame, Full Quality, Full Resolutions.
- Each Encoding channel can be set to the wanted parameters independently from the others

### Video Encoding profiles per each channel

- MPEG2 / Mpeg-4 H.264 selectable
- All Levels are supported

### Compression Modes per each channel

- Broadcast-Quality Hierarchical motion estimation
- VBR Statistical Multiplexing
- Also CBR Mode
- 1 Mbps to 20 Mbps
- User defined Program Name, Service Provider, and other PSI information
- User defined PIDs

## Channels Names & Data

### Programs Names

- User editable Programs Names These are the names that will appear on your TVs

### Network Name

- User editable Network Name This is the name that will appear on your TVs

### Channel numbers

- User editable Channel Numbers These are the destination memory numbers your TVs will try to automatically store these channels to. In case of conflicts with other existing programs, most TVs will prompt for conflicts decision ( depend solely by the TV model and its software )

## ASI input & Remux

### ASI input

- 1x ASI Burst/Byte 188/204 Transport Stream Input
- Accepts any MPTS ( multi program transport stream ) or SPTS ( single program transport stream )
- Rates up to 214 Mbit/s

### Remultiplexing

- Decoding of the Services information from the ASI input
- Ability to “ REMUX “ selected DVB services ( programs ) from the ASI input to the ASI/IP/RF outputs, together with the FOUR generated New programs from the 4 HDMI in.
- Complete management of PIDs, Service provider/s, Service Names, manual or automatic PIDs remapping or pass-through, PCR correction, EMM/ECM cas and DSMCC PIDs and descriptors pass-through, etc.
- Full Remultiplexer features are completely controlled by using our NMS Software ( included )

## IPTV Out

### Simultaneous IP Streaming out

- SPTS IP Streaming out
- RTP/UDP selectable
- Simultaneous to RF out
- Ideal for Wifi and Lan Simulcast
- UDP Multicast with IGMP support
- Compatible with any IP Set Top Box, Video player software VLC, etc.

# Specifications

## RF Modulator Out

### DVB-T Version ( version T )

- DVB-T Standard DVB ET300744
- Frequency range: 30 to 1000 MHz @ 1 KHz steps
- Channel Bandwidth : 6/7/8 Mhz
- RF IN – built-in Mixer
- RF Out Level: Adjustable from -10dBm to -30dBm
- Impedance : 75 Ohm ( 50 opt. )
- MER: Professional-Grade >47 dB
- Spectrum Shoulders: 55 dB for perfect adjacent-channel operations
- Out Filter: -70 dB of Harmonic and spurious suppression
- DVB-T modulations: QPSK, 16QAM, 64QAM
- FFT: 2K / 8K mode
- Guard Intervals: 1/4, 1/8, 1/16, 1/32
- Code Rates: 1/2. 2/3. 3/4. 5/6. 7/8

### DVB-C Version ( version C )

- DVB-C Standard DVB ET300429
- Frequency range: 30 to 1000 MHz @ 1 KHz steps
- RF IN – built-in Mixer
- RF Out Level: Adjustable from -10dBm to -30dBm
- Impedance : 75 Ohm ( 50 opt. )
- Spectrum Shoulders: 55 dB for excellent adjacent-channel operations
- Out Filter: -70 dB of Harmonic and spurious suppression
- - ITU-T J.83 A/C (Europe/Japan)
- - 16/32/64/128/256 QAM
- Any MegaSymbol

### CLEAR QAM North American ( version Q )

- ITU-T J.83 Annex B QAM-B
- PSIP descriptors edit and Injection
- Frequency range: 30 to 1000 MHz @ 1 KHz steps Channel 1 to 158
- RF IN – built-in Mixer
- RF Out Level: Adjustable up to 45 dB millivolts
- Impedance : 75 Ohm ( 50 opt. )
- Spectrum Shoulders: 55 dB for excellent adjacent-channel operations
- Out Filter: -70 dB of Harmonic and spurious suppression
- - 64/256 QAM
- Any Mega Symbols

## RF Modulator Out

### ATSC 8VSB ( version A )

- North American ATSC 8VSB
- PSIP descriptors edit and Injection
- Frequency range: 30 to 1000 MHz @ 1 KHz steps
- RF IN – built-in Mixer
- RF Out Level: Adjustable up to 45 dB millivolts
- Impedance : 75 Ohm ( 50 opt. )
- Spectrum Shoulders: 55 dB for excellent adjacent-channel operations
- Out Filter: -70 dB of Harmonic and spurious suppression
- Out Filter: -70 dB of Harmonic and spurious suppression

### ISDB-T ( version i )

- ISDB-Tb South American
- Frequency range: 30 to 1000 MHz @ 1 KHz steps
- RF IN – built-in Mixer
- RF Out Level: Adjustable from -10dBm to -30dBm
- Impedance : 75 Ohm ( 50 opt. )
- Spectrum Shoulders: 55 dB for excellent adjacent-channel operations
- Out Filter: -70 dB of Harmonic and

## Rack Mount

### Rack Ears

- The VeCOAX PRO 4 comes with both feet for desktop application as well the RACK MOUNT EARS to install into any standard 19" rack mount system

## Control

### Full Local Control/Setup

- Instant Access to all fetures from the local Keyboard and Large Display, without the need for a PC.

### Remote Control

- Via standard Web Browser from any PC, with security Login.

## Physical and Power

**Power** - 90 to 240 VAC 50/60 Hz - 28 Watts

**Cooling** – Noiseless cold operation

**Max Dimensions** 490x455x44.5 millim.  
(19.2 x 11.9 x 1.75 inches)

**Weight** - 7 Kilograms ( 15 lbs )

**Operating Temperature**

-10°C to 50°C (14°F to 122°F)

**Relative Operating Humidity**

10% to 90% (Non-condensing)

**Compliance**

EN55022, EN61000-3-210, EN61000-3-310, EN55024, CISPR22, EN60950-1, IEC60950-1 UL60950-1, UL60065, FCC Class B  
Warranty - 5 Years Registering the product

## Ordering Information

**VeCOAX-PRO4x-HD-y**

**Quad channels hdmi Desktop / Rack Mount**

**x = RF Output option**

**T for DVB-T RF out**

**C for DVB-C RF out**

**Q for J.83-B US Clear QAM RF out**

**I for ISDB-Tb RF out**

**A for ATSC 8VSB RF out**

**NONE – only ASI and IPTV out**

**y = Add special option list as follows**

**IP – adds IPTV SPTS RTP/UDP out**

**Audio options**

- AC3 adds AC3 Stereo compression

- AAC adds AAC Stereo compression

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