



TVU Server

Advantages

- △ Decodes multiple types of feed: TVU®, SDI and IP
 - △ Controls all aspects of a live transmission, including bit-rate and latency
 - △ Distribute video content globally to any audience
 - △ Supports IP streaming to SDI, CDNs and third-party websites
 - △ Offers optimized 4K decoding
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Monitor, control, manage and distribute all your video content.

The TVU Server is the backbone edge device within the TVU Ecosystem. The TVU Server is designed to host multiple TVU applications that can accomplish multiple tasks simultaneously including SDI/IP encode and decode, frame accurate IP video switching, graphics overlay, AI based closed captioning, store and forward file transfers and more. TVU Server is also the gateway to TVU Grid®, allowing IP content to easily be routed and distributed within your network or with partner networks.

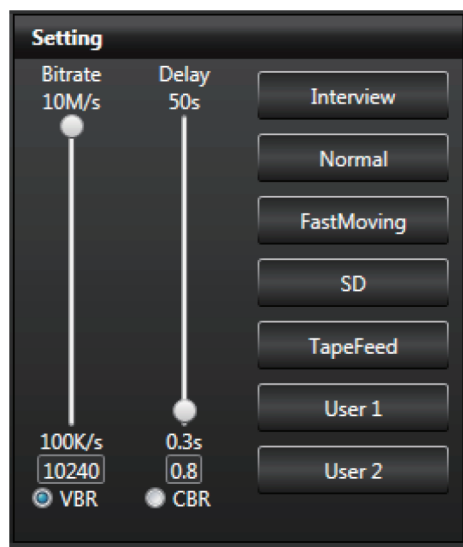


TVU RECEIVER

Complete Control Over Every TVU Transmission with the TVU Receiver Application

User-friendly Layout – The TVU Receiver interface allows you to monitor all TVU transmitters – TVU One™, TVUPack®, TVU MLink or TVU Anywhere – TVU Grid® or external IP transmissions. Easily view error rate, line quality and battery reserve in a simple but informative status bar. Survey the real-time status of multiple transmitters that are out in the field in order to easily switch between multiple live shots.

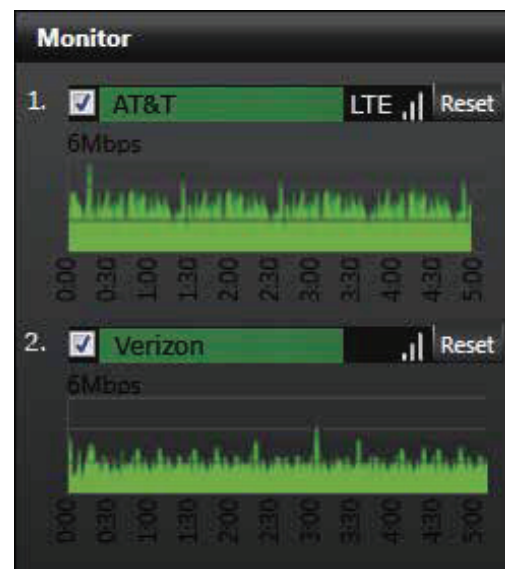
Control the Live Video Feed – Go live with just the click of a button or switch between live transmissions on the fly. Easily change the bite-rate and latency for your desired picture quality or select the Smart VBR option and let the system automatically optimize the picture for you.



Smart VBR Technology – TVU's Smart VBR functionality enables TVU transmitter devices to adapt quickly and efficiently to extreme fluctuations in bandwidth during live transmissions. The operator only has to set the desired latency for the live shot, and Smart VBR will automatically adjust picture quality based on the available bandwidth.

Adjustable Mode Selection – Switch with ease between five pre-set and two user configurable modes for bite-rate and latency, enabling you to choose the setting for each individual broadcast depending on the conditions of the transmission. Choose from Interview, Normal, Fast Moving, SD, and Tape Feed to set the most optimal bite-rate and latency. Users can also create their own pre-set transmission mode for the locations where broadcasts are frequently transmitted.

Monitor Signal Strength for Each Connection – Monitor every connection in each of your TVU transmitters through an easy to read status panel. The Receiver interface provides all the necessary information about the current status of all connected 3G/4G/LTE modem cards, WiFi and Ethernet connections, or satellite or microwave links for each TVU transmitter including carrier name, connectivity strength and IP address. Once the live transmission is complete, users can recall a histogram of the entire transmission in order to review the overall performance of the live shot.



Communicate With Each TVU Transmitter

Easily Manage the Configuration of Every Modem – Users can enable or disable each connection, remotely configure the modem cards through a web based interface, and complete a full reboot reset of individual modem cards all from the transceiver interface. When roaming, users have the ability to select which carrier a particular modem will roam on in order to utilize all of the cellular providers available.

Go Live with External IP Video Sources – The TVU Server supports the decoding of external IP video sources such as YouTube so that users can go live with these sources straight from the transceiver interface.

TVU Voice – Add the optional TVU Voice functionality for two-way VoIP and directly speak with a remote camera operator through a TVU transmitter in the field before, during, and after the live transmission. With one click of the mouse, switch between multiple sources or talk to all of your in-field transmitter operators at once. The broadcaster in the field is notified when the TVU Voice function is live by a status bar on the TVU transmitter screen.



GPS Tracking – Pinpoint exactly where one or all of your TVU transmitters are located when you have multiple transmitters in the field. With a single click, the TVU Server connects to an online map and pinpoints precisely where a TVU Transmitter is located anywhere in the world. This feature also tracks the path of the TVU Transmitter out in the field. Users have the ability to mouse over a particular part of the route on the map to reveal a thumbnail image of the transmission that was recorded at that exact location.

TVU GRID® ENCODER/DECODER

Distribute Live Video Everywhere

Take advantage of the TVU Grid® Ecosystem – Adding the optional TVU Grid® switching, routing and distribution solution instantly makes video content available to all Grid-enabled locations globally. Currently, over 2500 broadcast stations are on the TVU Grid® ecosystem for live video sharing and distribution.

ARCHIVED VIDEO CONTENT

Retrieve, View & Archive From Any TVU Transmitter – With the TVU Server, the recorded video from a TVU transmitter live shot is automatically uploaded to the device, providing a pristine transfer of the captured video segment. It also allows for the clipping of any desired video frames from a TVU transmitter, and downloading directly to the TVU Server device for editing.

OPTIONAL ADD-ON MODULES

IP Streaming Output – It's easy to take a live TVU transmission and output it to a third party website or social media platform with the IP Streaming Output feature. The live video is encoded into an IP format and can be sent to up to six different remote locations at once, including Facebook Live, Periscope and YouTube Live. TVU Server supports RTMP and RTMPS. Users also have the ability to add logos in the live stream.

TVU Command Center – TVU Command Center offers cloud-based centralized remote management and control of all TVU products and services. Command Center provides full control of TVU transmitters, TVU Receiver functions such as Geo-locate and TVU Grid®. It also supports the TVU Analytics, TVU Booking and TVU Alert services. TVU Command Center allows IP video sources to be added or deleted, transmit and output to a third party website or CDNs.

TVU Transcriber – TVU Transcriber is a context-based real-time speech to text transcribing service. Using voice recognition AI technology, the service provides the option to output text to a file format from an audio input source or embed text into a video stream for closed or open captioning. TVU Transcriber is highly accurate and capable of recognizing multiple languages.

Panasonic P2 Streaming - TVU Server fully supports direct streaming from select Panasonic P2 cameras including all of the following models: PX270, PX5100, PX5000, PX800, PX380, and PG50.

TVU Timelock - TVU Timelock easily turns multiple TVU One mobile transmitters into a versatile At-home/REMI solution. Broadcasters aren't tethered to camera crews or on-location production trucks when using Timelock, allowing for more cost-effective and flexible remote production. TVU Server supports live streams from Timelock.

TVU Server Technical Specifications*

TVU Servers are available in two models and are designed for easy installation at a production facility

Model

VS3500 - TVU Server



Form Factor

1RU Rack-Mount Chassis

Network Interface

1 independent 10/100/1000 BASE-T RJ45 Ethernet interfaces, 2 x USB 2.0, 2USB 3.0

Power Source

100-240V ~/3.5A 47Hz-63Hz

Software

TVU7

Display

HDMI and VGA

Dimensions

16.92in (430mm)L x 10.39in (264mm)W x 1.77in (45mm)H

Video Decode

H.264 or HEVC/H.265

IFB

External USB audio input with level control (mix/line), 1/4" & XLR

Weight

9.56lbs (4.34kg)

Video Resolutions FHD

BNC - SD/HD - SDI (HD 1080p 23.98/24/25/29.97/30/50/59.94/60, HD 1080i 50/59.94/60, HD 720p 50/59.94/60, SD PAL 625i/50, SD NTSC 525i/59.94)

USB Ports

2x USB 3.0; 2x USB 2.0

Operating Temperatures

32-89.6 °F, 0-32 °C

Audio

1x TRRS stereo audio/mic jack

Ethernet

4x 1GigE

Power Supply

Single

Model

VS3100 - TVU Server

**Form Factor**

1/3 of 1.5RU Rack-Mount Chassis

Network Interface

1 independent 10/100/1000 BASE-T RJ45 Ethernet interfaces, 2 x USB 2.0, 2USB 3.0

Power Source

100-240V ~/3.5A 47Hz-63Hz

Software

TVU7

Display

HDMI and VGA

Dimensions

5.70in (145mm)L x 11.69in (297mm)W x 2.55in (65mm)H

Video Decode

H.264 or HEVC/H.265

IFB

External USB audio input with level control (mix/line), 1/4" & XLR

Weight

5.24lbs (2.38kg)

Video Resolutions FHD

BNC - SD/HD - SDI (HD 1080p 23.98/24/25/29.97/30/50/59.94/60, HD 1080i 50/59.94/60, HD 720p 50/59.94/60, SD PAL 625i/50, SD NTSC 525i/59.94)

USB Ports

2x USB 3.0

Operating Temperatures

32-89.6 °F, 0-32 °C

Audio

1x TRRS stereo audio/mic jack

Ethernet

1x 1GigE

Power Supply

External power supply



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