TVU RPS

Synchronized live multi-camera remote production over the public internet



Major broadcast or sporting events have traditionally been produced using on-location production trucks and large production crews. However, always relying on a full crew and dedicated transmission equipment on-site can be an expensive and complex proposition.

TVU's Remote Production System (RPS) delivers a cost-effective alternative for live multi-camera remote television coverage, using a broadcaster's existing studio control room staff and equipment and a public Internet connection from the field. TVU RPS is comprised of a 1.5RU transmitter (encoder) and receiver (decoder). The TVU RPS transmitter encodes up to six synchronized SDI sources and transmits high quality and low latency IP video from the remote location to a studio based TVU RPS receiver, which in turn outputs six synchronized SDI outputs.

TVU RPS provides up to 2 low-latency, return video feeds from the studio to the field.





Highlights

- √ Completely synchronized, multi-channel video transmission solution
- √ High Quality, low-latency transmission over standard internet connections
- √ Utilize existing studio equipment and staff for remote, multi-camera live productions
- √ Cost effective, reliable and easy to deploy

TVU RPS supports both 1080i/720p HD as well as NTSC and PAL formats. The system uses TVU's revolutionary Inverse Statmux Plus (IS+) transmission algorithm for high-quality, low latency stable transmissions. The system also features a simple web interface for monitoring and controlling all aspects of the transmission, including real-time previews of all-six channels, current bit-rate and latency.

With TVU RPS, a broadcaster can now do multi-camera remote production for live coverage without the costs associated with an expensive dedicated fiber or satellite links, extensive dedicated transmission equipment and large groups of on-site production crews.

TVU RPS Specifications *

Models	RPT -4900 - RPS Transmitter /encoder PRP -3900 - RPS Receiver /decoder
Operating System	Linux
Encoder	Up to 6 channels of H.264, 4:2:0 CBR encoding, 100k-10Mb/s
Supported encode/decode video formats	NTSC, PAL, 720p50, 720p59.94, 1080i50, 1080i59.94
Genlock	BB or Tri level
Video Inputs	Ports 1-8, 1.0/2.3 DIN, SD/HDI-SDI (BNC adapter included) Ports 1-6 utilized for primary transmission and ports 7-8 are utilized for return video
Genlock Input (decoder)	Ref: 1.0/2.3 DIN, BB or Tri level (BNC adapter included)
Keyboard and mouse	USB 2.0 x 4
Display	1 x DVI-D, 2 x HDMI 1.4
Ethernet	2 x GigE Ethernet ports (8P8C jacks)
Power Input	IEC C14 power inlet (cable supplied)
Voltage	100-240V AC
Power	Max 250W
Hardware Dimensions	1.5RU rack mount 252mm x 434mm x 65mm (9.92" x 17.08" x 2.56") does not include rack ear or front handle dimensions
Weight	4.74 kg (10.45 lbs)
Operating Temperatures	10°C to 35°C (50°F to 95°F)

^{*}Specifications are subject to change.



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