



Wireless Video Devices and H.264 Encoders



New
Live:Air
VidiU Pro
Beam



Compatible with **Live:Air**, Teradek's iPad video production system



TERADEK VIDIU

VidiU makes it easy to stream video to viewers all over the world, via YouTube Live, Ustream or Livestream. With an HDMI input and hotshoe mounting there is no easier way to get your pictures out to your audience.

VidiU encodes live video using H.264 compression and AAC audio at up to 5Mb/s. Embedded audio, audio in/out are included. VidiU transmits over dual band MIMO WiFi, Ethernet, or via a single 3G/4G USB modem. The unit includes a rechargeable Li-Ion battery that runs for up-to 60 minutes.

A free iOS and Android app also allows live monitoring in real-time. As a dual band Access Point, you can connect your tablet directly to the device or connect via your local network.

 **Webstreaming**

 **Multi-networks**

 **HD monitoring**

> Free dedicated app available



VidiU

Encode | Stream | Monitor

TERADEK VIDIU mini

The VidiU Mini allows everyone to broadcast your events on popular streaming platforms like Ustream, Livestream, and YouTube Live or build your own using Wowza Streaming Server. Since VidiU Mini is compatible with most streaming platforms, you can choose where to go live whenever you like.

- Micro HDMI Input
- Wireless live streaming without a PC
- Integration with Livestream, Ustream and YouTube
- Go Live anywhere cable-free
- Internal 3 hour battery
- Stream to iOS devices
- Bluetooth connectivity



TERADEK VIDIU Pro

VidiU Pro uses new ShareLink technology which can combine the transmission power of up-to four 3G / 4G phones and tablets. This enables you to reach your audiences at the highest quality.

- Micro HDMI Input
- Multi-network live streaming without a PC
- Integration with Livestream, Ustream and YouTube
- Proxy recording
- Manage over Bluetooth or via Core
- Internal 2 hour battery
- Zixi protocol-enabled
- Stream to iOS devices



VIDIU PRO



VIDIU MINI



Live:Air

Camera 1



Camera 2



Camera 3



Camera 4



LIVE
RECORDED
CAMERA FEEDS

TEXT
GRAPHICS
ANIMATIONS
CLIPS



Video Production & Deliver For All

TERADEK Live:Air

A Vision mixer and Titling app for Apple iPad that connects to Teradek Vidiu and Cube devices

Live Production Suite

Broadcast to the world with the new Live:Air video production suite for iOS. With a host of real-time video editing tools and support for all of the popular live streaming services, the Live:Air app helps you communicate with your audiences with style and sophistication.

Live production at the touch of a finger

Add a professional touch to broadcasts with Live:Air's graphics, text overlays, and other visual effects. Mix the live stream with pre-recorded video clips, or even switch between multiple live video feeds, all with elegant looking transitions.

Keep your eye on the stream

Live:Air's video management system allows users to preview and monitor each video source and audio input, track on-air uptime, and start/stop broadcast from an intuitive touchscreen interface. Live:Air can superimpose images and text effortlessly.

A selection of sources

Import live video from a GoPro, camcorder, or DSLR using any WiFi-enabled Teradek encoder.

Every source is automatically discovered and configured for you instantly, even if you add more feeds during a live broadcast. For those without a camera, Live:Air can use live video from other iOS devices or use nothing more than an iPad's built-in camera. An optional RTSP license is also available to ingest live video from AXIS cameras or network video devices.

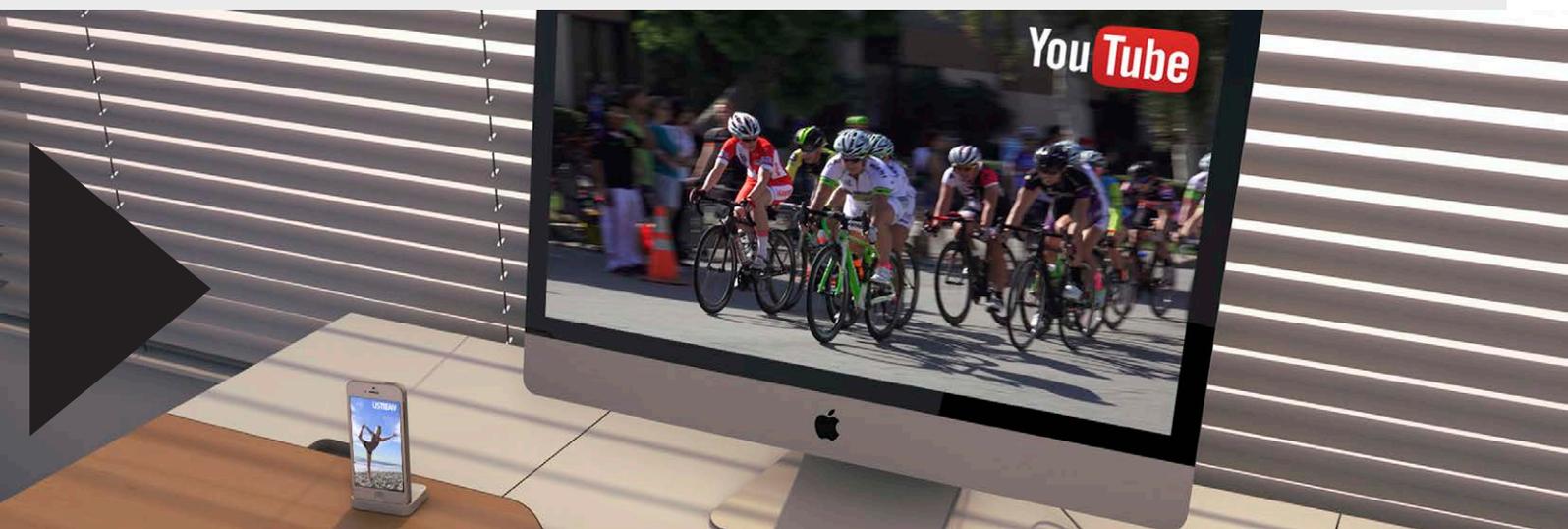
Intuitive presets and controls

With a T-Bar for manual transition control, a smart workspace for overlay design, and a built-in audio mixer panel, enthusiasts and professionals alike will feel right at home on this mobile live video production platform.

Stream to any destination

Easily stream to popular video platforms like Ustream, Livestream, and YouTube Live or build your own using Wowza Streaming Engine™ to take advantage of more advanced features.

*The free version of Live:Air limits streaming to 30 minutes and includes a watermark on feed.





BOLT Pro: Perfect wireless video with no delay

Teradek Bolt Pro is a latency-free wireless transmission system that for 4:2:2, 1080p 50/60 video and 2-channel audio.

Bolt transmits over the unlicensed 5GHz band, which has less interference than the 2.4GHz band. For optimal performance in challenging RF environments, Bolt systems can utilize Dynamic Frequency Selection (DFS) to avoid interference.

Transmitters are housed in an aluminum chassis with multiple 1/4" mounting holes. With a low power draw (4W - 7W), it has a Power to P-tap cable that to connect with external power sources such as V-mount or AB batteries.

New features include 3D LUTs and USB 3 Capture!

High-quality

Reliable Transmission

Professional Rigs

BOLT

Transmit | Record | Monitor



Model	Range	USB out	Multicast	SDI HDMI
Bolt Pro 300 TX/RX	< 100m	No	Yes	Both
Bolt Pro 600 TX/RX	< 200m	Yes	Yes	Both
Bolt Pro 2000 TX/RX	< 600m	Yes	Yes	Both

TRAX

Encode | Decode | Control



T-RAX: modular enterprise encoding 19" rack

As a blade system, T-Rax allows you to add or remove a variety of Teradek solutions on the fly, including H.264 encoders and decoders and control platforms such as Sputnik. The system supports any combination of up to 8 hot-swappable cards that can be tailored to your unique requirements.

T-Rax can be fitted out to suit your needs. For example, it can house 8 Teradek encoder cards for multi bit rate streaming or a combination of encoders, decoders, and Sputnik for master control. T-Rax is a great way to scale an IP video workflow.

T-Rax encoder cards support High Profile H.264 video at bit rates up to 15Mbps. They are also compatible with a variety of the most popular transport protocols, including MPEG-TS, RTP/RTSP, HLS, RTMP, TDS, and ZiXi.

Modular Rack

Multi-bitrate

Encoders



Program Out



H.264 out at up to 105Mb/s



H.264 Decoding



CUBE®

Encode | Stream | Record | Monitor



- > Compatible with TeraCentral
- > Compatible with TeraView
- > Compatible with Live:Air
- > TriCaster & Wirecast Plugin available



- MIMO-enhanced WiFi delivers excellent signal strength.
- x55 Cube encoders have an integrated rechargeable Li-ion battery
- Available with SDI, HDMI or composite connectors



SLICE

A powerful rack-mount HD-SDI H.264 encoder and decoder. Supporting 1080p video at 10Mb/s, Slice streams MPEG Transport Stream, RTMP, RTSP, RTP Multicast. It supports closed captioning and IFB remote communication.



CUBE PRO

The camera-back Cube Pro H.264 encoder provide a powerful, compact wireless solution for local monitoring and proxy recording. It supports resolutions up to 1080p over 2.4/5Ghz WiFi, Ethernet, and 3G/4G/LTE cellular networks via a USB modem. Cube Pro offers an HD-SDI input in V- or AB versions.

TERADEK CUBE: encode HD with low latency

Cube provides a compact wireless streaming solution for local and remote monitoring. It utilizes H.264 compression 2.4/5Ghz WiFi, Ethernet, and 3G/4G/LTE cellular networks via a USB modem. Protocol support includes RTP, RTSP, RTMP, MPEG-TS, and HLS, which allows broadcasting directly to a website, Facebook page, or any content delivery network (CDN).

With the Cube, directors, clients, and others on set are able to monitor every live shot locally on an iPad, iPhone or laptop with a delay as low as 4 frames using the free TeraCentral application. The TeraView iOS application allows monitoring of up to 4 live video feeds right on an iPad. The device can also be configured for remote monitoring using MPEG-TS or RTSP.

Cube encoders can be paired with dedicated decoders for low latency, point to point HD streaming over local WiFi or over the Internet.

With a Zixi-license, a Cube can stream wirelessly to an Ethernet-connected Link and then to Zixi's cloud services for highly reliable, broadcast-quality video over volatile networks.

Cube features internal H.264 proxy recording to SD card. This effortlessly generates dailies and instant replays. Proxies mirror full resolution files with identical start/stop points, timecode and file names.

Multi-talented encoders

iPad monitoring

H.264 decoders

Broadcast quality

Proxy workflows





BEAM

> Send very high quality, high bitrate video at low latency

Extreme H.264



Beam is a full HD camera-back H.264 encoder, capable of delivering video at up-to 50Mbps.* Beam transmit video up to 800m with just 2 frames of latency. Whether the job requires a wireless link back to the OB Van or an MPEG-TS stream back to the station, Beam gives broadcasters unparalleled flexibility in the field.

*Transmitting above 30Mbps requires using the LAN port.

Features



- 3G-SDI input
- choice of AB- or V-mount battery plates
- OLED screen for quick configuration
- Ethernet for broadcasting over wired networks
- Bi-directional port for camera control & IFB
- Multicast to up-to 4 receivers



Long Range Wireless Encoder



Taken from an independent review by cameraman Andy Smith. Written for the Guild of Television Cameramen's InFocus Magazine

"So much for trials without production pressure, now a real world test. Whilst I had the loan unit, I had a call from Links Broadcast to provide live camera into their Ku band uplink truck UKI 787. Links had hired in a Link XP COFDM SD radio system for the task but I offered to try the Beam to see if anyone would notice the difference. It was an SD job for Al Jazeera, uplinked to their Eutelsat 16 satellite capacity then direct to their MCR and studio complex in Doha, Qatar in the Middle East. We worked the link at 12Mbps, although we could have gone to a lower data rate for SD. The RF path was about 40m to the uplink across the road. The receiver was rigged above head



height on the truck and SDSDI feed from the RX into the vehicle matrix. The transmitter was on the back of the camera between the camera body and the camera battery, making very little difference to the overall camera balance when handheld. Embedded SD-SDI was connected from the camera to the TX. IFB was via GSM in the uplink and sent to the presenter via a radio earpiece.

That was a major success

"We did the first three or four inserts into Doha. Mark, the SNG engineer, paid close attention to our output at all times and confirmed there wasn't any break-up caused by passing HGV's etc. By the end of the day, we had clean pictures throughout, and still nothing was said in Doha, so I

concluded that we had provided normal service. That was a major success.

"Later, I was invited to the NEC with Peter Rance to organise the links for a camera in amongst the exhibition on to some gigantic screens at the opposite end of the hall. I was unable to attend but Peter was able to get the Beam system running alone. The receiver was mounted as high as possible on a lighting stand. The transmitter was on the back of the camera, handheld in the crowd.

Beam provided faultless pictures

"The Beam provided faultless pictures throughout the day, most of the time about 60m away from the RX, with heads and exhibition stands obstructing the signal pathway. Peter's production team were delighted with the results.

"I've had the loan unit for a month and haven't found any major problems. It performs perfectly well as a shortrange radio camera system. It's rugged and robust. The pictures are great with very little latency. I don't think I would ever use the RS432 data, the streaming server, or the IFB/intercom in my application, but others may find it useful. I understand that The Beam's transmitter antennas are also very close to the radio mic receive antennas on a PMW500.

Worth every penny in my view

"Set up for the Al Jazeera uplink the RRP is £3,999 and street price at the time of writing is around £3,500 – worth every penny in my view."





CLIP

Encode | Stream | Monitor



TERADEK CLIP

Multi-network delivery

Clip is the world's smallest and lightest H.264 transmitter developed for unmanned aerial vehicles. Clip is a powerful HD video transmission solution for low latency monitoring on iOS devices or point to point broadcasts with Cube decoders over 2.4/5GHz WiFi. Clip has a micro HDMI, dual RP-SMA jacks for high gain antennas, and can transmit up to 100m.



Auto-reconnect

To ensure a robust low latency video transmission, Clip utilizes the custom TDS transport protocol, which allows drones to fly in and out of range without having to restart the transmitter.

HD monitoring

Clip transmits to iOS/Android devices or a Cube decoder with <4 frames latency, for a 1st person view of the UAV's flight in real-time.

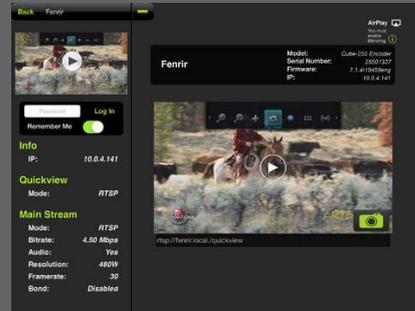
> Free dedicated app available



Apps

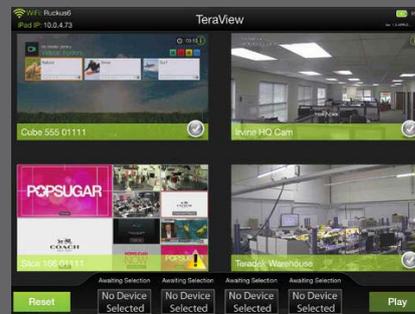
TeraCentral for iOS & Android

Launch the TeraCentral app and select the live feed you wish to view. Functionality includes control of the encoder and stream recording. It also supports the application of a LUT to the chosen stream (see panel).



TeraView for iOS & Android

The TeraView app allows the monitoring of up-to 4 live video feeds on a tablet. TeraView even allows users to record any or all of the four feeds in 720p or 480p with synchronized video.



On-set Monitoring with Live LUT Application



The essential on-set tool for RAW shooters.

TeraView for iOS and Android devices support colour grading using industry standard or customer 3D Lookup Tables (LUT).

This allows the director to transform the flat live video feed from the camera into a lifelike or custom post-production look.

Users can synchronize any custom 3D LUT file type from the DIT cart in real-time simply by connecting a smartphone or tablet to the same IP network video village utilizes, and running our LUT sync utility.

TeraView is compatible with...

SLICE

CLIP™

CUBE®



BOND

Encode | Transmit



BOND: bonded transmission system mounted to a Cube H.264 encoder



BOND II: H.264 encoder integrated with bonded transmission system



BOND PRO: integrated H.264 encoder with bonded transmission system with V or AB mount

	BOND	BOND II	BOND PRO	LINK
Format	Camera-top	Camera-top	Camera back	Desktop
H.264 encoder	Requires Cube	Integrated	Integrated	Requires Cube
Cellular dongles	5	6	6	6

TERADEK BOND: a satellite truck mounted to your camera!

Teradek Bond uses multiple 3G/4G dongles simultaneously to send great HD pictures back from the field. With Bond, there's no longer any need for a fixed Internet connection.

Bond ensures that content is delivered reliably and at the highest quality possible. As well as using multiple dongles from multiple network suppliers, it dynamically adjusts bitrates and the buffer in real-time to adapt to varying network conditions.

Bond devices use hardware-based H.264 compression, resulting in very low power consumption and long run times. Each bonding solution offers a local monitoring capability on iOS devices, closed captioning support, and IFB for communication from the studio to the field.

Bond devices require a **Sputnik** server, to convert each bonded feed into a standard video format that can be sent to any streaming platform on the web or to an H.264 decoder. Sputnik can be cloud-hosted with Amazon EC2 instance or hosted on your own Linux server.

Alternatively, **Base** combines Sputnik's link aggregation with H.264 decoding in a single rack mount server with an HD-SDI output.

Dashboard is a web GUI for monitoring the performance of Bond. It displays the bit rate and latency per modem, total data usage, modem status, buffer length, and other statistics to help keep track of streaming performance in real time.

 **Multi-network delivery**

 **Adaptive technology**

 **H.264 compression**

 **Re-compiling video**

 **System monitoring**





Teradek's mini transmission devices

- BOND**: Send HD video over multiple 3G/4G, WiFi, Ethernet and BGAN networks
- CUBE**: HD encoder: stream H.264 with 4 frames latency over Ethernet, 3G/4G & WiFi
- BOC**: Zero latency transmitter supporting uncompressed HD
- CLIP**: Miniature encoder and WiFi transmitter for iOS / Android monitoring
- BEAM**: Encode and send very low latency H.264 video over 800m
- VidiU**: HDMI encoder for live HD webcasting to any online video platform

Teradek's rack-mounted units

- SLICE**: Enterprise H.264 encoder & decoder supporting MPEG-T, RTMP, RTSP, RTP Multicast at up-to 10Mb/s
- Edge**: Designed for OB vans and mobile studios, Edge is a rack-based version of Bond / Link with 6 built-in mini PCIe radios, WiFi and Ethernet
- Base**: Base encases a Sputnik server for re-compiling streams transmitted by Bond, Link or Edge. Includes an H.264 decoder with an HD-SDI output
- Core**: Cloud-based remote management system: monitor, control & route all of your Teradek encoders, cellular bonding units and decoders
- T-rax**: Host, power and monitor multiple Teradek mini devices

Contact your local reseller: