Viper

Record, Stream, Publish, VOD

Intelligent IP Video

VIPER – CAPTURE THE MOMENT

MultiStream Recording, Publishing, Streaming, VoD

Haivision's Viper is a compact, integrated appliance for capturing, streaming, reviewing, distributing, and publishing rich, multi-stream high definition content.

Today, presentations, situational training, and instruction rely on live, personal expression by a presenter combined with dynamic media – animated presentations, real time video, information from software programs such as spreadsheets, computer aided design tools and simulators. In order to effectively transmit the in-room experience live via IP video streaming or to review the experience at a later time on-demand, both the live camera and the associated information display must be available to out-of-room viewers.

The Viper supports capturing and streaming high-resolution sources simultaneously, such as an HD camera and a computer. Either source can be high definition video or high-resolution computer encoded in real-time to H.264. During live viewing or replay of the "event", the streams remain associated and synchronized. Both media streams are always available at full resolution, and with Haivision's patented InStream player, the viewer can select the most appropriate display layout.

| Feature	Benefit
Dual Stream HD	Capture & stream events with full context
Graphics content captured at full frame rate	Fluid replay of rich-media presentations
Graphics captured through VGA/DVI	Any computer content can be captured, not just PowerPoint, and no content to upload!!
Both inputs captured as independent streams	Presenter isn't bothered with layout decisions
InStream with flexible multi-stream layouts	Administrators or users determine how to best view the multi-stream rich media
Integrated "Furnace" streaming system	No need for separate infrastructure, serve live and on-demand multi-stream directly from the Viper
Secure, zero-install InStream viewer	No endpoint software to install, cross platform consistent media delivery
Furnace compatible realm device*	Perfect for fuelling a central Furnace system*
Distributed recording	Eliminate the need for central recording servers
Linux operating system	Stable, reliable, and isolated from Window related update and patch requirements
Compact, mobile design	Easy to deploy, ultra-reliable hardware platform
Touch screen interface	User oriented interface, simple to use
Multi Video baseband support	Free to create dual stream and/or record assets from a combination of various sources

* Coming soon with release of Viper VF

Haivision's 5th Generation H.264 Appliance

Viper can be used as a stand-alone recording/streaming appliance or integrated with a Furnace IP video distribution system to give users direct recording/streaming control leveraging a distributed recording architecture.

## Viper MAX - Stand Alone Stream, Record, VoD with InStream™

Viper MAX combines the power of Haivision's acclaimed H.264 encoding with an integrated Furnace operating environment. Through a simple, user-friendly touch screen operators can set up their multi-channel session, initiate simultaneous streaming and recording, and automatically make content available for on-demand viewing. The Viper captures full resolution, full frame rate dual-channel content synchronously assuring contextual review. During a session, remote viewers can watch multi-stream HD content live simply by clicking a web link and launching Haivision's patented browser independent InStream player. InStream doesn't require installation, works equally across all platforms, and provides 100% secure video distribution. After recording your event, you can make the multi-stream asset available for direct on-demand viewing. When combined with the Viper's Conditional Access module, the operator can securely publish assets either within the Viper portal, as a simple web links emailed to specific people or groups, or automatically transfer the files to any network location.
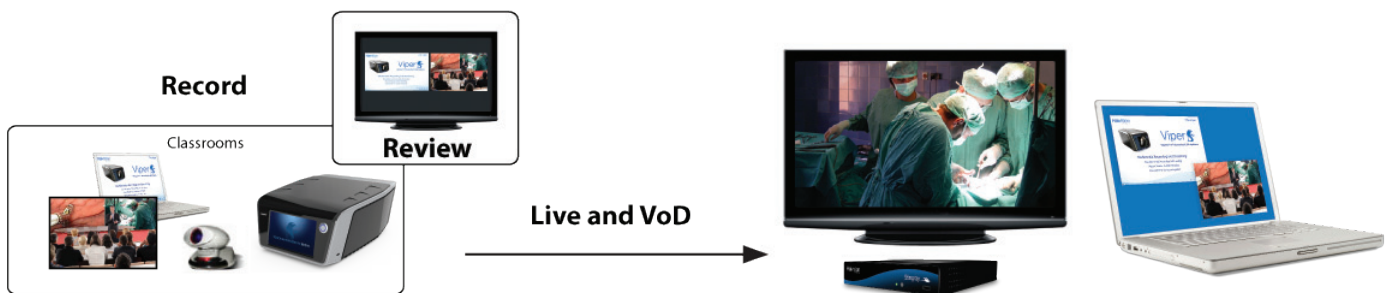
Coming soon!

Viper VF - Fuel the Furnace with Distributed Recording & Publishing

Viper VF can effectively off-load the recording from your facility's Furnace IP video system. For clients that have large IP video recording requirements, establishing large central recording systems and assuring the ability to record any endpoint at any time may be impractical due to server or network capacities. Recording at the edge and publishing to a central video on demand system eliminates such dependencies. Combining Viper endpoints with a central Furnace IP video system is the ideal solution for large medical, educational, and enterprise media systems giving the flexibility to stream or record rich media events anywhere, anytime. The Viper can be managed simply by the operator, initiating streaming channels and publishing recording data, or can be centrally managed through the Furnace's administrative interfaces. Viper that are attached to central Furnace systems that include the Furnace Conditional Access module benefit from system wide security of all live and on-demand video assets.
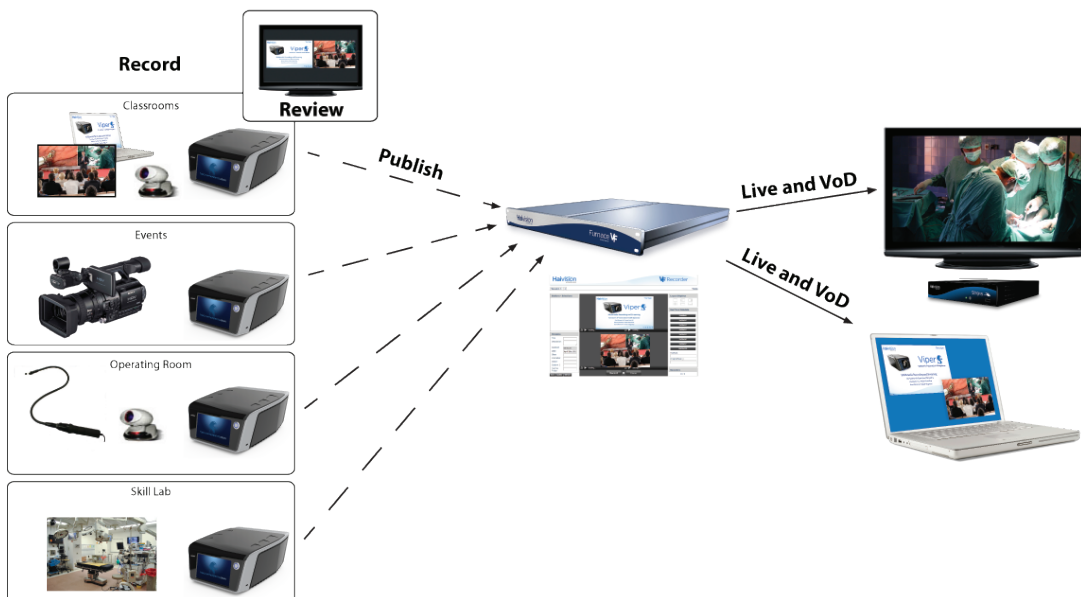
size reference only

TOUCH ANYWHERE TO BEGIN

SPECIFICATIONS (PRELIMINARY)

AV INPUT SPECIFICATIONS
Video (Inputs):
2 x DVI-I
  Y, Pb, Pr / RGBHV component analog
  Y, Cb, Cr / DVI component digital
S-Video   NTSC/PAL
Composite   NTSC/PAL
SD-SDI   SMPTE 259M-C
HD-SDI   SMPTE 292M, 274M, 296M
3G-SDI   SMPTE 424M, 425M
Video Resolutions:
1920x1080p 60/59.94/50/30/29.97/25 Hz *
1920x1080i 60/59.94/50 Hz
1280x720p 60/59.94/50/30/29.97/25 Hz
1280x720p 60/59.94/50/30/29.97/25 Hz
720x480/576p 60/59.54/50 Hz
(interlaced shown in fields per second)
Computer Resolutions:
*1920x1080 60 Hz **
1280x1024 75/60 Hz *
1280x768 85/75/60 Hz
1280x720 60 Hz
1024x768 85/75/60 Hz
Audio (Input):
1/8" (3.5mm) Mini, 2xRCA
  Unbalanced Stereo Analog Audio
XLR
  Balanced Stereo Analog Audio
SDI Embedded**
  SD-SDI: SMTE 272M**
  HD-SDI: SMTE 299M**
RCA Audio
  Unbalanced Stereo Analog Audio

* Dual stream high resolution (1080p) must fit within a 60 fps total budget.

AV OUPUT SPECIFICATIONS
Video (Outputs):
HDMI VGA, XVGA, SXVGA
Audio (Output):
1/8" (3.5mm) Mini
  Unbalanced Stereo Analog Audio

ADVANCED FEATURES
Dual Quality Streaming
HD/SD De-interlacing
Built-In Downscaling
Deblocking Filter
Forward Error Correction**
AES Encryption 128-bit or 256-bit**
SD aspect ratio configuration
SD AFD and WSS (HDSDI)
Color space configuration (DVI) (Auto Detect)

VIDEO ENCODING
Compression Standard:
H.264 (MPEG-4 AVC part 10)
  ISO/IEC 14496-10
Main Profile
  Level 4.2 and lower Intermediate Levels
I, IP framing
  Configurable Group of Picture (GOP) size
Configurable frame rate
  Bit Rates:
SD/HD from 150 kbps to 15 Mbps
  Rate Control:
  CBR/VBR
  Latency (encode only):
  Less than 100ms

AUDIO ENCODING
Compression Standard:
  MPEG-2 AAC-LC ISO/IEC 13818-7
  MPEG-4 AAC-LC ISO/IEC 14496-3
Audio Channels:
  2 per video channel
Bit Rates:
  From 32 to 448 kbps per audio pair
Frequency Response:
  From 20 Hz to 22 kHz

IP NETWORK INTERFACES
Standard:
  2x Ethernet 10/100/1000 Base-T, auto-detect, Half/Full-duplex
Connector:
  RJ45
Networking Protocols:
  Unicast Streaming
  Multicast Streaming (IGMP v3)
  MPEG Transport Stream over UDP

MANAGEMENT INTERFACE
Standard:
  RS-232**
Management:
  HTTPS (web browser)**
  HTTP REST API

PHYSICALS
Dimensions :
  108mm H x 219mm W x 267mm D
Weight:
  10 lbs. Approx.
Power:
  100-240VAC external locking power supply
Temperature:
  Operating: 0C to 50C
  Non-operating: -40C to 70C
Humidity:
  Up to 95% Non-Condensing.

**To be available in future release

Ordering Information (please obtain complete system quotations from Haivision or an authorized Haivision integration partner)

S-VIPER-MAX   **Viper MAX** - For stand alone use or integrated with Furnace, integrated InStream server, dual HD stream, record, VoD, publish appliance. Dual DVI-I, HD-SDI, Component, Composite, S-Video, XLR, RCA inputs. Dual channel H.264 HD full frame rate encoding up to 15 Mbps.

S-VIPER-VF   **Viper VF** - For use integrated with Furnace systems only, dual HD stream, record, and publish appliance. Dual DVI-I, HD-SDI, Component, Composite, S-Video, XLR, RCA inputs. Dual channel H.264 HD full frame rate encoding up to 15 Mbps.