



High-definition streaming so advanced, it's simple.

A next generation HD streaming media system.

Video streaming from high-definition (HD) video sources has reached a new level of quality and performance with the Niagara 7550. Designed for professional broadcasting applications, this powerful streaming appliance simplifies the complex workflows often associated with the transformation of HD video over broadband and mobile networks.

The Niagara 7550 takes advantage of the latest multi-core processing technology giving you the power you need for multi-platform video streaming applications.

Simplicity without sacrificing functionality.

The Niagara 7550 accepts standard- or high-definition video through its SDI interface, and can switch on-the-fly between SD or HD sources, without having to re-initialize the system. An SDI loop-out is also provided to facilitate your workflow.

Audio inputs include analog stereo, two channels of AES/EBU and up to eight stereo pairs of embedded SDI audio. Its powerful video pre-processing features include closed-caption extraction and rendering, de-interlacing, inverse telecine, bitmap overlay, scaling and cropping.

Multi-platform video delivery.

The Niagara 7550 comes standard with ViewCast SimulStream® technology. From a single video source, you can deliver multiple simultaneous streams in various formats, bit rates and resolutions, including live streaming to Apple® iPhone® and iPad® mobile digital devices.

It also includes Niagara SCX® management software so you can control all of its key features remotely, through an easy-to-use web interface.

Niagara SCX greatly enhances the live streaming delivery workflow. By eliminating the need for an external stream segmenter, encoding workflows are simplified and overall system costs reduced.

Schedule and manage live video.

VMp Live, an event scheduling software module that is part of the ViewCast Media Platform (VMp™) suite of products, is now available as an add-on component to the Niagara 7550. VMp Live is an easy to use, cost-effective solution to schedule and manage your live video events.

Ideal Solutions

- > Broadcasters
- > Content delivery networks
- > Network service providers

Applications

- > Live streaming / simulcasting
- > Webcasting
- > Mobile TV
- > Video on Demand

Key Attributes

- > Live capture, encoding and streaming for professional-grade digital video and audio delivery
- > High-definition and standard-definition SDI video, embedded SDI, AES/EBU and analog audio capabilities
- > Video confidence monitor
- > Touch-control interface, front-panel LCD status display, multi-segment LED audio meters
- > Niagara 7550 supports Adobe Flash® dynamic and Apple HTTP live (*iPhone and iPad mobile digital devices*), Adobe Flash H.264, MPEG-4, H.264, H.263 and Microsoft® Windows Media® (*Silverlight®*), as well as 3GPP/3GPP2, MP4 container support.
- > Individually brand streams with bitmap overlays (e.g., logos and graphics)
- > Niagara SCX® with web interface provides remote setup, control and monitoring
- > Self-documenting SDK for workflow customization
- > Front-panel A,B,C buttons activate one-touch, pre-programmable streaming profiles
- > Self-contained unit - no mouse, monitor or keyboard required

NIAGARA® 7550

Streaming Media System

Front View



Rear View With Audio/Video Input Descriptions



- 1 BNC connector for SDI video with embedded SDI audio
- 2 BNC connector for SDI loop-out
- 3 XLR connector for AES/EBU 2 stereo channels
- 4 RCA for unbalanced audio
- 5 Left/right XLR connector for balanced audio

Niagara SCX web interface

The Niagara 7550 appliances are pre-configured with Niagara SCX remote management software.

This web-based user interface allows you to browse to any Niagara 7550 on a LAN or WAN and manage the following system configurations:

- Create, modify and delete encoder profiles.
- Start and stop individual encoders.
- Pre-configure and assign encoding profiles to A,B,C buttons.
- View and manage encoder log files and entries.
- Modify system network configuration settings (network name, IP configuration).

* Output streams tested up to 720p



Encoding Formats:

- Adobe® Flash® H.264 *
- Adobe® Flash dynamic streaming
- Apple® HTTP live streaming
- Microsoft® Windows Media® (Silverlight®) SD and HD *
- MPEG-4, H.264, H.263
- 3GPP/3GPP2, MP4 container support

Monitoring:

- LCD status display
- Video presence indicator
- Stereo audio headset (3.5 mm)
- Front confidence monitor

Inputs:

Video:

- SDI (standard definition and high definition) (1 x BNC)

Audio:

- Embedded SDI audio (16 channels or 8 stereo pair)
- AES/EBU (4 channels or 2 stereo pair) (2 x XLR)
- Balanced stereo (2 x XLR)
- Unbalanced stereo (2 x RCA)

Video Format:

- SMPTE 259M and 292M SDI standard

Connectivity:

USB ports:

- 2 rear panel, 1 front panel

Ethernet:

- 2 x 1 Gbit ports

Software:

- Niagara SCX® with web interface
- SimulStream®

Hardware:

- Multi-core processors
- 1 terabyte SATA HDD

Pre-Processing:

- Scaling, cropping, de-interlacing, inverse telecine
- Closed-caption rendering (SD only)

Weight:

- 35 lb (14.1 Kgs)

Dimensions:

- 2U rack mount appliance (2RU x 17" W x 22" D)
(2RU x 43.18 cm W x 55.88 cm D)

Power:

- 400 W power supply

Additional Contents:

- Rack slide rails
- Rack handles
- Rubber feet

Hardware Warranty:

- 1 year limited hardware warranty