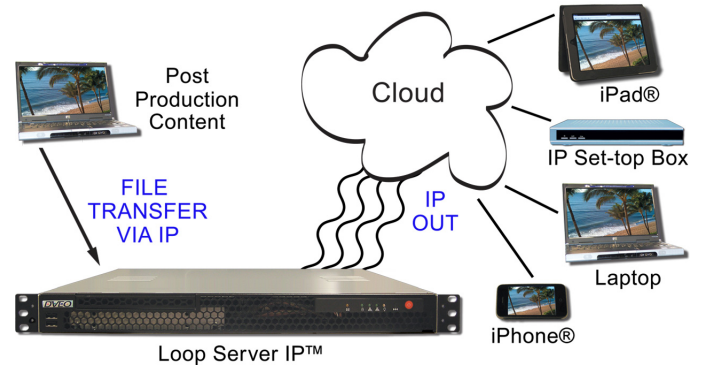


# Loop Server IP™ 50ch

Real Time, 1 RU, Quick Starting, Embedded Linux® Based, Remotely Manageable, Multi Channel Streaming Playout Server for Content. Incorporates a Scheduler. Runs on an Intel® Xeon® CPU. Relies on a "Minimal" Linux® Kernel (Residing in a Flash Memory Device) that is Highly Task Optimized for Streaming Many Channels, Operated via a Friendly GUI that can be Run From Anywhere. Specifically Designed for Playing Continuous Streaming to and from Hard Drive. Outputs up to 50 IP Streams at the Same Time. Create Your Own 50 "Streaming" Web Channels with 50 Different Movies or Content Playing on Your Preset Schedule.



## Features

- Streams multiple output protocols from the on board .5 TB hard drive
- Use individual files or multiple playlists for input
- Watch Folder Mechanism for updates
- Looping or scheduled streaming with NTP
- Output HLS with MP4, H.264, or optional H.265 ts files
- Expandable Hard Disk via SANs, etc.
- Outputs: Fifty simultaneous IP streams through GigE port (RJ45)
- IP output protocols: UDP, RTP, RTMP (Open Flash), HTTP, with DLNA support
- Support for adaptive bitrate streaming protocols such as HTTP Live Streaming and MPEG-DASH
- Supports M3u8 playlist files (standalone and through HTTP Live)
- Tested compatible with major brands of IP devices including Amino™, Roku®, Android™, and Apple iPad®
- Remote GUI includes some scheduling
- SNMP, REST, SOAP support for remote management and monitoring
- Relies on Intel® Xeon® processor

## Overview

Many web sites now offer video streams over IP available on demand. The world however needs a multichannel web streaming oriented video server that is flexible and easy to use.

The **Loop Server IP™** is a multichannel TS server with scheduling and looping functionality. It streams multiple HLS, RTMP, or .ts video and audio files from the on board SSD and .5 TB drive, with scheduled playlists. SSD's eliminate the need for RAID to obtain maximum performance.

The Loop Server IP stores content as transport streams and adds various "Wrappers" such as HLS, etc. at time of departure. The system can output a great many streams at the same time. The limit is the network interface.

The input of the stored content is stored on the hard drive via FTP file transfer.

Input can be individual files or multiple files. Numerous formats and file types are supported, including HLS, RTMP, H.264 ts, flv, H.264 ps, .mov, VC-1 (.wmv), mkv, and others. The system naturally supports loopable playback.

This system is continually tested with the latest Atlas™, Wowza®, and Adobe® Flash® servers, and many CDNs.

## Applications

- Signage server for continuous streaming of multiple channels to multiple end points and devices
- Streaming Server that resides at ISP or CDN for continuous scheduled or looped streaming service to publish to your web site
- Build your own streaming utility with streams you prepared that are ready to play
- Great Movie Player for your school or small hotel
- Test signal sources
- Digital Signage



Computer Modules, Inc.

11409 West Bernardo Court  
San Diego, CA 92127

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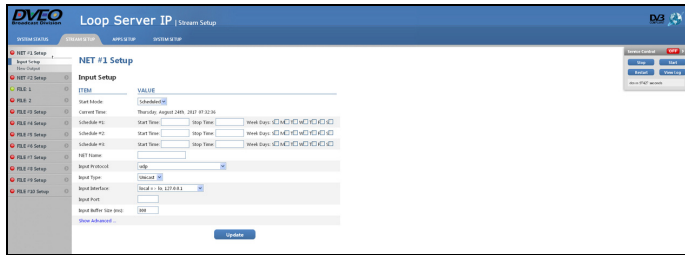
[www.dveo.com](http://www.dveo.com)

# Inputs/Outputs

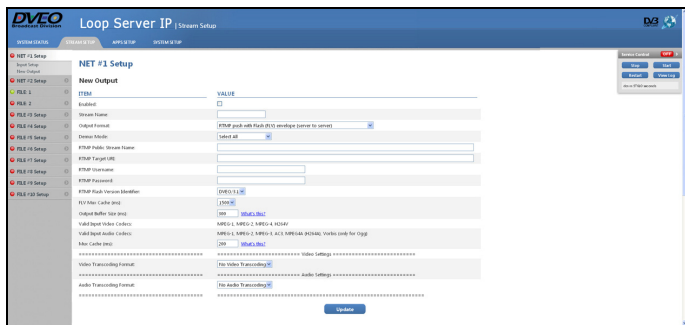


**LAN WAN**  
(Either can be used for IP Output)

# Sample of GUIs



**Scheduled Input Setup**



**IP Output Setup**

# Ports Utilized

Protocol	TCP Ports	UDP Ports
HTTP	80, 8000, 8001, 8080, 1-65535 (out)	
HTTPS	443	
RTMP		1935
RTP		6970-6999, 16384-32767

# CDNs Tested With:

1. Akamai\*
  2. Limelight
  3. Tata
  4. Octoshape
  5. CDNetworks
  6. Internap
  7. Highwinds
  8. Verizon\*
  9. Ustream\*
  10. Mirror Image
  11. Tulix\*
  12. More to come!
- \*Certified

# Ordering Information

Loop Server IP 50ch in 1 RU system

# Specifications

## Supported Resolutions – Input and Output

1920 x 1080	720 x 480	480 x 480	qHD
1280 x 720	704 x 480	480 x 320	H.264up
720 x 576	640 x 480	320 x 240	

Also supports any custom resolution not listed here.  
Note: Supports closed captions.

## Input

File Types Supported:	H.264 ts, flv, H.264 ps, .mov, VC-1 (.wmv), mkv, and others
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## IP Output

Output “wrappers”:	UDP, RTP, RTMP (Open Flash), HTTP, with DLNA support
Type:	IP-multicast, IP-unicast
Video:	NTSC or PAL

## Administration

Access:	Web interface, SSH (Secure command line interface)
SNMP:	Monitoring and alerts

## CPU and Operating System

CPU:	Intel® Xeon® processor
OS:	DVEO embedded Linux® on SSD
Hard Drive:	.5 TB

## Physical & Power

Size – 1 RU high:	19 x 14.96 x 1.7 inches (W x D x H) 483 x 380 x 43.4 mm (W x D x H)
Voltage:	100-240V, 4-2A, 60-50 Hz, 220 watts
Operating Temperature:	10°C to 35°C
Non-operating Humidity:	20% to 90% non-condensing
Conformities:	UL, BSMI, CSA, FCC, CE, RoHS
Weight:	15 lbs. (6.8 kg)

## Security

Ports security scanned to MIL requirements prior to shipment

# Block Diagram

