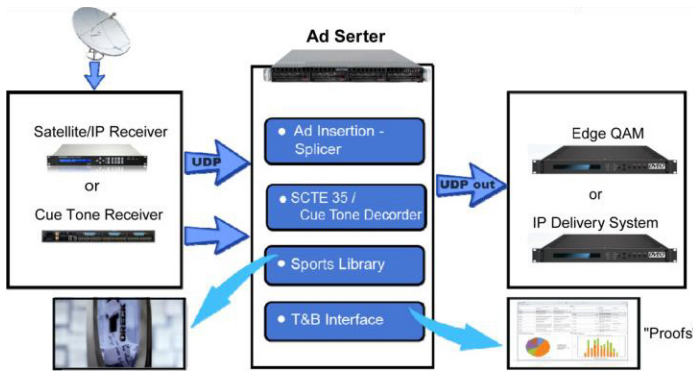


AD SERVER™ SSAI IP/IP: 1-40ch



- Broadcast quality, real time, high density, 1-40 channel, Windows® based, web manageable, H.264 or MPEG-2 based Ad Server with the ability to detect SCTE-35 or cue tone triggers to insert ads.
- A high density, feature rich, comprehensive SSAI server that enables monetization of your content.
- Inserts stored ads, video clips, graphics, or slates into live streams, on a schedule.
- Designed for operators who want to insert regional/local ads in their channel line-up.
- MPEG-2 out for cable.
- H.264 out for OTT.

Overview

- Ad Insertion is the process of inserting (splicing) an advertising message into a media stream such as a television program. For traditional broadcasting systems, ads are typically inserted on a national or geographic basis that is determined by the distribution network. For IPTV where destination addressing is available, ads can be directed to specific users based on a device, content, viewer's profile, or other available information.
- Ad Scheduling is the process of selecting campaigns or content and establishing a time that the media will be transmitted or made available (accessible) or streamed.
- Cue Tones are signals that are embedded within media or sent along with the media that indicate an action or event is about to happen. Cue tones can be simple event signals or they can contain additional information about the event that is about to occur. An example of a cue tone is a signal in a television program that indicates the time
- when a television commercial will occur and how long the time will last.
- Ad Splicers select from two or more media program inputs to produce one media output. Ad splicers receive cueing messages (get ready) and splice commands (switch now) to identify when and which media programs will be spliced.
- Digital Program Insertion (DPI) is the process of splicing digital media segments or programs together. Because digital media is typically composed of key frames and different pictures that compose a group of pictures (GOP), the splicing of digital media is more complex than the splicing of analog media that has picture information in each frame which allows direct frame to frame splicing.
- VAST tags enable video players to synchronize with Ad Servers. It enables ads to appear on video players across different ad networks.



Computer Modules, Inc.
11409 West Bernardo Court San Diego, CA 92127
Tel: 858-613-1818 Fax: 858-613-1815
www.dveo.com

★ Features

- One of the most feature rich products on the market
- Inserts video clips into live video feeds on a schedule or via signaling like SCTE-35
- Simultaneously processes up to 40 HD 1080i streams
- Passes through Closed caption, AFD and other user data
- Secure Remote Scheduling from anywhere via WebInterface
- Generates “As Run Logs”, Proof of Play for ads inserted
- Built in intelligence with auto population makes scheduling easy
- Supports 1080p, 1080i, 720p, and 480i, and all standard broadcast resolutions
- Selects transport streams by program numbers
- Manages ad inventories
- Pre-programmed hourly templates for Cue tone and SCTE breaks schedules
- 1 RU or 3 RU rack mountable frame
- Web based GUI with multi-level access control
- Comprehensive Customization to suit your needs is possible
- Supports SPOT-X
- Optional analog Cue Tone Detection
- Optional GPI Detection
- Supports VAST (Video Ad Serving Template) protocol working with several ad exchanges. Supports VAST versions 2, 3, and 4.

● Applications

- Ad Insertion Platform for Cable, IPTV, OTT and Cellular companies

Example:

- Ad Insertion: Splice insert commands are received and ads are inserted seamlessly in video stream

Live Presentation	Splice Trigger Received Ad1 Inserted	Next Ad Inserted	Back to Live view
10:37:00 to 10:43:00 AM	10:43:01 AM	10:44:01 AM	10:45:01 AM
			

Capabilities

- Provides Ad Splicing and Ad Insertion in one unit.

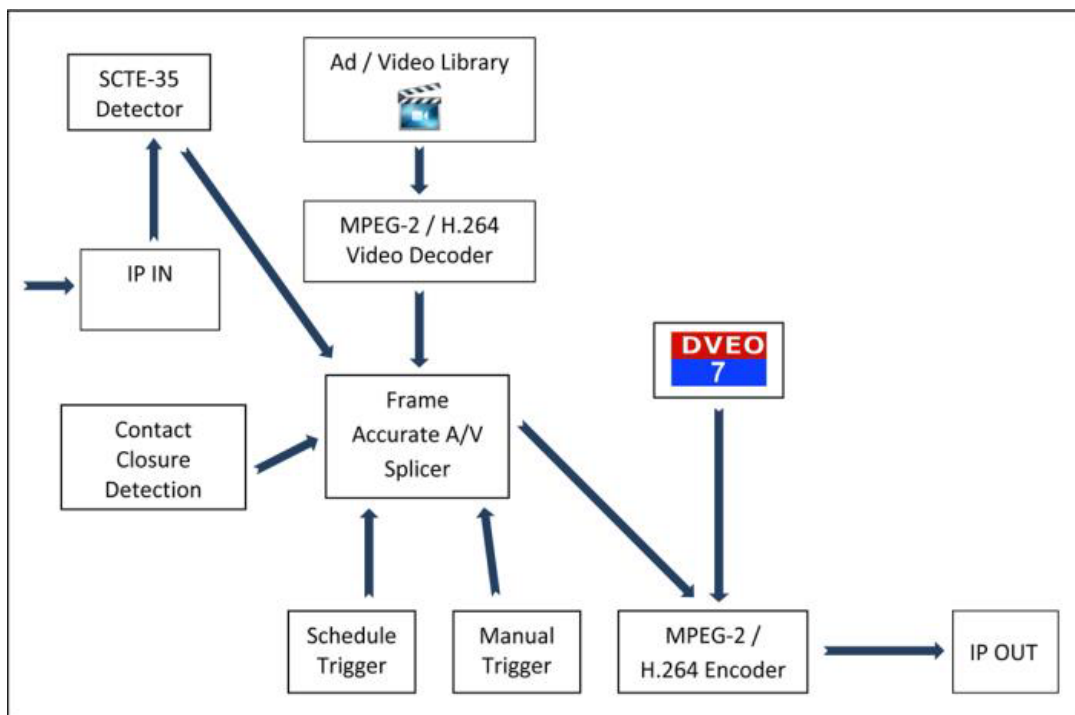
Automated Advertisement Solutions

- SCTE-35 Support
- Contact Closure
- Cue tones
- Scheduling
- Manual Trigger
- Video Ads
- AC-3 pass through
- Supports 5 Audio Pairs
- Frame Accurate
- Playlist Import
- As Run Logs
- Pre-programmed hourly templates for Cue tone and SCTE breaks schedules

Web Based Management System

- Network/Application Monitoring
- IPMI Port for out of band monitoring and control
- Optional Dash Board provides status of up to 100 Ad Servers at different physical sites
- Transcoder/Scaler
- Network Transcoder for video format conversions
- Same file for different video resolutions

Block Diagram



Sample of GUIs

	CONTROL	INPUT	LOGO	OVERLAY	SCROLLING TEXT	ALERT	SLATE	PREVIEW
C1-FOXSP	STOP	OK	ON	ON	ON	ON	ON	ON
C2-FOX	STOP	OK	ON	ON	ON	ON	ON	ON
C3-COON	STOP	OK	ON	ON	ON	ON	ON	ON
C4-NATGeo	STOP	OK	ON	ON	ON	ON	ON	ON
C5-FILMZV	STOP	OK	ON	ON	ON	ON	ON	ON
C6-TNT	STOP	OK	ON	ON	ON	ON	ON	ON
C7-SONY	STOP	OK	ON	ON	ON	ON	ON	ON
C8-WARNER	STOP	OK	ON	ON	ON	ON	ON	ON
C9-E-ENT	STOP	OK	ON	ON	ON	ON	ON	ON
C10-MTV	STOP	OK	ON	ON	ON	ON	ON	ON

Status Window with Multiple Instances
Remote User Interface lets users control all 40 Channels on one Ad Server.

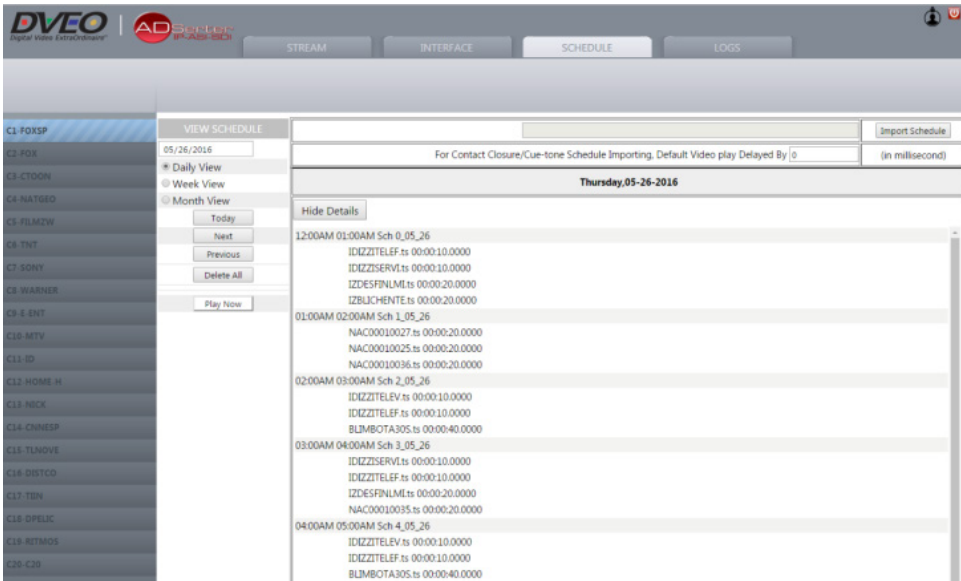
Input/Output Interface and Video Encoding Programming

- Ad Server extracts a single program from Multi Program Transport Streams. Specify the program number of interest.
- Video parameters are automatically identified
- Specify Video encoding parameters in Video Bit Rate Settings. Up to 5 audio pairs are passed through to the output.

Schedule Programming

- Ad Server accepts MPEG-2 and H.264 transport stream files as ad files
- Auto Import Schedules – Works with most Traffic and Billing system generated schedules
- Auto generation of As-run logs
- Auto download of commercials/spots from the cloud

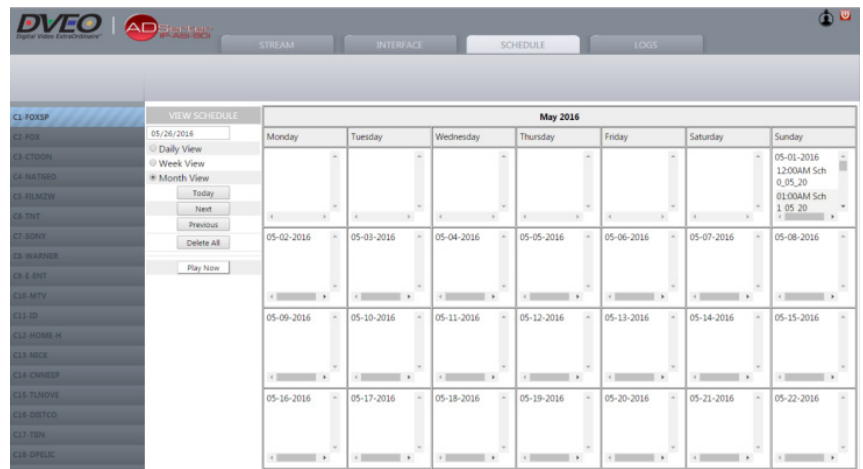
Sample of GUIs



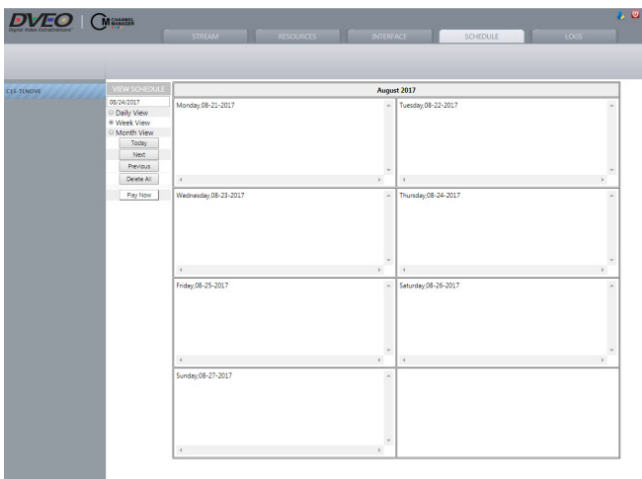
Schedule Viewing

- Provides Daily, Weekly and Monthly schedule views
- To modify any schedule, just click it and all parameters can be programmed

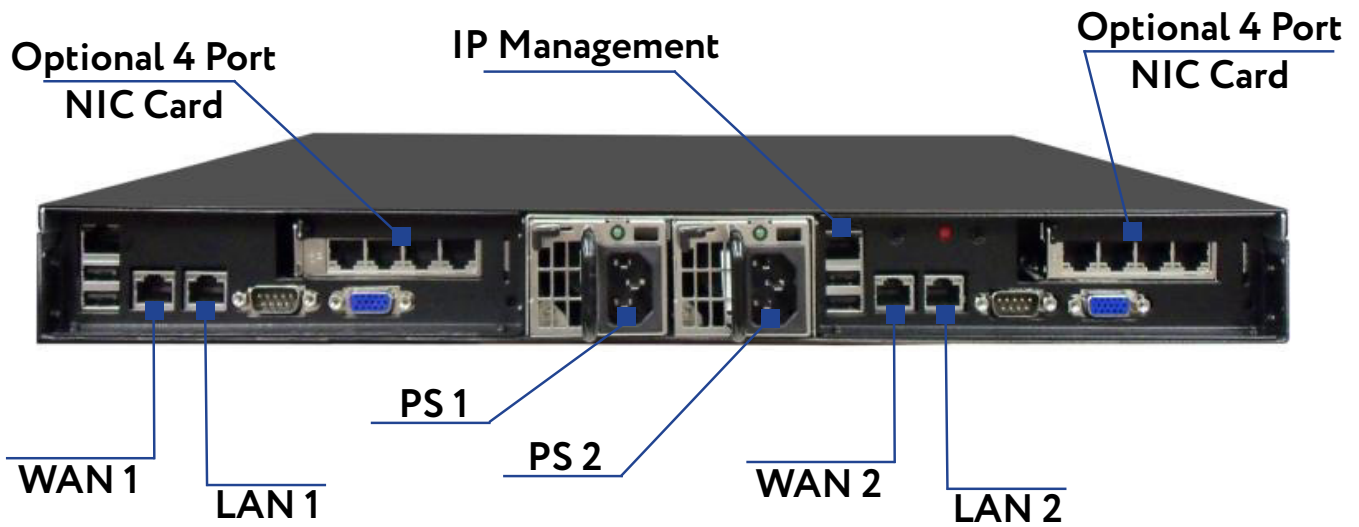
Monthly Schedule



Weekly Schedule



Inputs and Outputs



Ad Inserter Triggers

		Trigger Format			
TS Input Interface	TS Output Interface	SCTE 35	Contact Closure	Schedule	Manual
IP	IP	Yes	Yes	Yes	Yes

Audio/Video Codecs

		Output Video Format			
Live Input Video Codec	Ad File Video Format	Output Video Format	Live Input Audio Format	Ad File Audio Format	Output Audio Format
MPEG-2, H.264	MPEG-2, H.264	MPEG-2, H.264	MPEG-2, AAC, AC-3	Same as Input	Same as Input

IP Input

Input/Output:	Dual 1 GigE Ethernet, RJ45
IP Protocols:	UDP
Type:	Unicast, Multicast

Output Bitrates

H.264 Output Bitrates:	.5 to 8 Mbps
MPEG-2 Output Bitrates:	1.0 to 14 Mbps

Media

OS Drive:	1 to 2 TB HDD or SSD
Media Drive:	1 to 2 TB HDD or SSD, as required Optional 2 x RAID 1 configuration

Network and IPMI

Data Port:	1 Gbe Port
Management Port:	1 Gbe Port
IPMI:	IPMI 2.0 Dedicated LAN Port

CPU and Operating System

CPU:	Depending on Configuration – Intel® 6 to 16 Core Xeon®
OS:	Windows® 7
Memory:	32 GB or 64 GB

Physical Power: 1 RU Hooding Version

Size (W x H x D):

1.7 x 17.2 x 27.75 inches (43 x 437 x 705 mm)

Voltage:

Dual Redundant 1200W high-efficiency power supplies with PMBus (80 Plus Rated)

Power Consumption:

15 amps maximum

Operating Temperature:

10° to 35° C (50° to 95° F)

Non-Operating Temperature:

-40° to 70° C (-40° to 158° F)

Humidity:

8% to 90% (non-condensing)

Weight:

40 lbs (18.1 kg)

Conformities:

UL, CSA, CE, RoHS



Ordering Information

Ad Serter: IP/IP 1-40CH



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