One to Four Channel Remotely Manageable, Real Time, Unattended Operation, Live or Stored MPEG-2 Broadcast Oriented TS In and Out Content and Ad Playout System with Scheduled or Triggered Content Playout with Video Ads, Text, or Graphics Insertion via Overlay, Splicing, or Video Squeeze. Supports SCTE 35 triggers, Optional Analog Cue Tones, and Works with Most EAS Systems like Digital Alert, Trillithic, Sage, etc. Interfaced to Several Traffic Systems and we can interface to yours. Designed to Give You a Sophisticated, Easy to Use Playout Server for Over the Air or Cable Channel Use.

### Features

- Stores and manages Content, Ads, Messages, and Graphics clips, on local RAID
- Complete scheduled playout system with interface to most traffic systems
- Inserts or overlays ads, video clips, or emergency alerts – text and/or graphics – into video feeds on a schedule or via signaling like SCTE 35 signals from EAS generators
- Supports multiple SCTE 35 trigger levels
- XML based graphics insertion for rich graphics in channel
- Supports Insertion of Ads from the cloud
- Creates crawling messages and emergency alerts with programmable fonts and background colors, in any language
- Compatible with Trillithic™, Sage™, and Monroe™ EAS alert generators
- Works with most fonts: Chinese, Arabic, Indian, etc. via Unicode interface
- HD or SD
- Passes through Closed caption, AFD and other user data
- Secure Remote Scheduling from anywhere via Web Interface
- Generates playlists for time-shifted content that includes long form spots, all national ads, local ads and content
- Built in intelligence makes scheduling easy
- Supports 1080p, 1080i, 720p, and 480i, and all standard broadcast resolutions
- Selects transport streams by program numbers or PIDs
- Features daily, weekly, and monthly schedule-based logos, alerts, and text insertion
- Arbitrary location for graphics
- Choose from static, rotating, flipping, or blinking graphics, logos, and text
- Manages Ad inventories, logs Ad Plays, and generates Proof of Play list
- Creates Real Time Clock display in programmable fonts and colors anywhere on screen
- Displays remaining and next advertisement Time in output video
- Scales Input video from 10% to 100% and overlay on graphics – Ideal for EPG
- Overlays animating PNG files and scales Input Video from 10% to 100% – Ideal for L-Wrapper, L-Squeeze and transparent overlays. Video squeezes.
- Select any degree of transparency
- Easy drag and drop placement to position logo, text, or graphics on screen
- News feeds from RSS in any language, with programmable fonts and background colors
- Able to mask entire screen with a static image in case of video input failure Auto Bypass in case of power failure of PLAYSERVER
- Sun Fade Detection to play prerecorded content on Solar Flare Days
- Optional Live Recorder function to record live content to play in the case of loss of ASI input signal
- Service Schedule for maintenance of antenna or other infrastructure
- 1 RU or 3 RU rack mountable frame
- Web based GUI with multi-level access control and Drop Box Inputs for all content
- Template based character generator. Supports 3D fonts.
- Works as a playout server – with or without ASI input signal
- SLATE function puts up an Empty Background on which you can type messages
- Comprehensive Customization to your needs is possible
- ESAM support in development
- Optional analog Cue Tone Detection
- Supports many forms of GPI
- Can also play recorded files from hard drive, in loop mode
- IP input and output and SDI input and output versions available

### Overview

Our PLAYSERVER ASI 4ch is a complete Channel in a Box with support for four channels. It is a complete four channel system tailored for the North American Broadcast and Cable markets where sub channels are transmitted along with a primary channel.

It offers scheduled play out for live and stored content, channel branding, EAS interface support, SCTE 35 based ad insertion, and interfaces to most traffic systems. Naturally it offers “As Run” ad reports. It is ready to feed your favorite TS mux which inserts PSIP information and grooms your programs for 19.38 Mbps.

It inserts full-screen or part screen ads or transparent messages on one to four targeted cable or on-air channels or sub channels. And messages can be quickly revised in real time, to give critical updates to viewers. The high density system is designed for cable companies or broadcasters who require an easy to use EAS messaging system to communicate with their subscribers.

This cost-effective system inserts emergency alerts – plus text and graphics – anywhere on video content, live, on a schedule, or via signaling like SCTE 35. It is compatible with Sage, Trillithic™ and Monroe™ EAS Alert generators. It works by decoding the transport stream, overlaying the graphics, and transcoding the result. Alerts can be overlaid anywhere on H.264 or MPEG-2 video content.

The PLAYSERVER ASI 4ch supports both HD and SD – 1080i, 720p, and 480i, or arbitrary resolutions. It supports four SD (or one HD and three SD) MPEG-2 live streams arriving via ASI. It selects transport streams by program numbers or PIDs.

The system ships with a graphics creation application but uses most graphics formats. Graphics can be created in several formats, although bitmaps and pngs are preferred. The position of the graphics, transparency, and fade characteristics can be configured via the management console. Easy drag and drop placement positions logos, text, or graphics on screen.

Also graphical elements can be inventoried on the on board hard drive. Large local graphical libraries can be created for quick use under dynamic real world events. For example, the hard drive can store maps showing evacuation routes. The system is also able to mask the entire screen with a static image in case of video input failure or auto bypass via relay.

### Applications

- Channel in a Box
- Ad Insertor for Cable or Broadcast
- Emergency alert system for Broadcast and Cable
- Very Flexible Video Messaging System to subscriber base
Capabilities

The Broadcast Industry’s first system to provide Graphic Solutions, Ad Insertion, Emergency Alerts and Video Playouts in one Unit.

**Automated Graphic Solutions**
- Video Scaling
- EPG with video
- L-Wrap
- L-Squeeze with zoom in and out
- Logo Fade In/Out
- Animated Logos
- Slates
- Full Screen
- Graphic import
- Graphics Overlay
- XML based graphics insertion
- Multiline Alerts
- RSS Scrolling Text
- FTP text support
- Scheduling

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

**Web Based Management System**
- Built-in Video Viewer
- User level Access control
- SNMP Compliant
- Supports Solarwinds Network/Application Monitoring
- IPMI Port for out of band monitoring and control
- Optional Master Server controls up to 100 PLAYSERVERs at different physical sites

**Multiple Interface Options**
- IP to IP
- ASI to ASI
- IP to ASI
- SDI to ASI
- SDI to SDI

**Combination Solutions**
- Video Scaling
- EPG with video
- SCTE-35 Support
- Contact Closure
- Cue tones
- Scheduling
- Manual Trigger
- Video Ads
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- Supports 5 Audio Pairs
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**Emergency Alert System for San Diego**

**Live Video with Channel Branding, Alert Text, L-wrap for Overlaying Ad Image**

- Image is overlaid by Channel Playout Manager on video
- Alert Text
- Live Video
- Animated .png Channel logos are added

With .png logo images, Channel Playout Manager can also generate Fade In / Fade Out effect with variable level of Transparency.
- .png Image sequences can be used to display animating logos.
- Channel Playout Manager overlays a transparent .png image on live video.
- pin scroll message, a .png logo can be added as a separator.

**Scaled Video Clip Playing Inside Customer Created Slate**

- Video window: Video clip here.
- Programmable X, Y positions, Width, Height.
- Video is scaled to fit in the Video window.
- Scrolling Message from RSS link to provide relevant Current News to viewers

**EAS Connectors Example**

- Graphics can be created in several formats. The position of the graphics, transparency, and fade characteristics can be configured via the management console.
- Graphical elements can be inventoried on the on board hard drive. Large local graphical libraries can be created for quick use under dynamic real world events.
- Fancy boxes, borders, background colors, and identifiers can also be used to enhance the video content. Inside these distinct areas you can insert scrolling or horizontally crawling text. Military customers will use this device to insert a moving icon that can be manipulated via a joystick.
Sample GUI’s

Stream and Graphical Resources Insert Control
Remote User Interface lets users control all 4 Channels on one PLAYSERVER.

Graphical Resources Programming

- Logo files: 32 bit png files with a transparency layer or 24 bit.bmp files
- Video Overlay: 32 bit png files with a transparency layer or 24 bit.bmp files
- Overlay: Specify Scaled Video Width and Height parameters to scale video
- To overlay video on graphics, use .bmp full screen graphics file
- To overlay transparent graphics on video, use 32 bit .png file
- Alerts: Supports 3 line Alerts. Also supports codes for inserting Real Time Clock, Time to Next Ad, Current Ad remaining time.
- Scrolling Text: A prefix text with RSS link is supported. RSS data is continuously fetched and converted into scrolling text.
- Slate file: 32 bit .bmp files

Input/Output Interface and Video Encoding Programming

- The PLAYSERVER ASI 4ch 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

- PLAYSERVER ASI 4ch accepts MPEG-2 and H.264 transport stream files as ad files.
- In addition to ad files, the system can overlay graphics on schedule or other triggers like SCTE35
- Alerts and scrolling text can be scheduled to add last minute promotions to video files – useful for advertising special weekend prices, etc.
- Play Now button to override schedule playout
- Evergreen Schedule Player – When input is lost, it plays pre-recorded “evergreen” content
- Automatic scheduling to fill up slots with promotional spots after paid spots are scheduled
- 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

Schedule Viewing

- To modify any schedule, just click it and all parameters can be programmed

Detailed Schedule Viewing
Specifications

Audio/Video Codecs

<table>
<thead>
<tr>
<th>Live Input Video Codec</th>
<th>Ad File Video Format</th>
<th>Output Video Format</th>
<th>Live Input Audio Format</th>
<th>Ad File Audio Format</th>
<th>Output Audio Format</th>
</tr>
</thead>
<tbody>
<tr>
<td>MPEG-2, H.264</td>
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<td>MPEG-2, AAC, AC-3</td>
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</tbody>
</table>

Graphic/Text Input Formats

Text: RSS, Text file, Type into GUI, or copy and paste
Images: .BMP, .PNG

Graphical Element Inventory

10,000-plus elements: Varies with hard drive capacity

DVB-ASI Input/Output

4 Inputs/4 Outputs: DVB-ASI, 200 Mbps
Formats: MPEG-2 MP@ML, H.264/AVC

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

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: Intel® Xeon® 16 Core
OS: Windows® 7 Pro 64 bit
Memory: 32 GB

Physical & Power

Size -- 19 x 5.25 x 25.2 inches (W x H x D)
3 RU high: 48.26 x 13.34 x 64 cm (W x H x D)
Power Supply: 3U 500–600W – Redundant
2U Mini Redundant 300–650W
Temperature Range: Operating: 0°C ~ +50°C on Full Load
Storage & Shipping: -20°C ~ +70°C
Non-operating Humidity: 5% to 95% non-condensing
Weight: 39 lbs. (17.69 kg)
Conformities: UL, BSMI, CSA, FCC, CE, RoHS

Note: Pictures shown are typical configurations. Exact product configuration will depend on number of channels and other requirements.

Ordering Info

PLAYSERVER ASI 4ch: Broadcast+Cable
PLAYSERVER IP 4ch