

Soloist2-S SDI

MPEG2 Playback System

with Serial Digital (SDI)

Overview

The Soloist2-S SDI ads built-in serial digital (SDI) video switching with embedded AES-EBU audio switching to the Soloist2-S MPEG 2 Playback System. This broadcast quality local origination solution integrates automatic switching, sophisticated scheduling, playback verification, and provides concurrent SDI and analog out, synchronously!

Benefits

> Easy Installation

The Soloist2-S SDI with front-panel display, configures easily. Pass a channel through a unit, select a network source or select a cue source (DTMF, GPI, Time, Vertical Interval, Terminal or Front Panel), load inventory, use drag-and-drop software to build a schedule, and you are ready to go live. Your engineers can quickly be trained to repeat the installation procedure as you expand to additional channels.

> Ultra High Reliability

As an embedded system, the Soloist2-S SDI has been engineered for ultra-high reliability. At its core, a high speed RISC CPU running under Adtec's very video transport operating system (VTOS) provides unparalleled stability. Re-booting is unheard of.



Soloist2-S SDI

> Exceptional Performance

The Soloist2-S SDI is a performer, from the moment it is removed from the box, its rugged durable mechanical and electrical characteristics are evident. No power switch was incorporated in the design, reiterating its rugged reliable nature. Once plugged in, the Soloist2-S SDI is ready to run intended for 24-7-365 operation. Nothing compares!

> Easy Integration

As a stand-alone solution or component part in any local origination system, the Soloist2-S SDI is adaptive. Its small footprint, large storage capacity, low power consumption and MPEG playback compatibility allow it to easily integrate into many environments.

> Integrated Satellite Data Receiver (Optional)

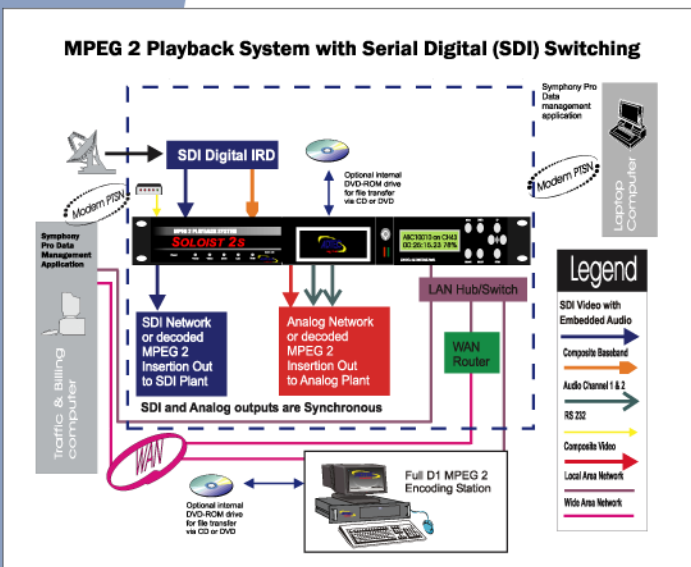
Schedules, store and forward content and commands can be sent using DVB-MPE encapsulation and Adtec's FCMP server. The DVBridge tunes to the PID and extracts the IP data in its original form. Up to 4 PID's can be defined per service with as many as four concurrent services.

Availability

The Soloist2-S SDI is available in a rugged 1 RU steel case with capacity for 2 internally mounted IDE drives. Optionally add an internal satellite data receiver or a DVD drive for loading content.

Applications

- SDI Switching Cable Local Origination Playback
- SDI Switching Broadcast Long Form Playback
- High-End Entertainment Venues
- Satellite MPE or DVB IRD with SDI Out



Soloist2-S SDI MPEG2 Playback System

with Serial Digital (SDI) Video Switching



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Features

Broadcast Quality MPEG 2 decoding
 Local storage for up to 60 hours of MPEG 2 video
 Extremely smooth frame accurate transitions
 Zero pre-roll
 Built-In QPSK Satellite Receiver (Optional)
 On-Screen Display (OSD)
 MP@ML decoding up to 15 Mega bits per second
 Composite, YC analog video
 Balanced and unbalanced analog audio
 Broadcast quality vertical interval video router
 Tally output via NC/NO relay and open collector transistor circuit
 Serial, Ethernet and Parallel control
 Robust API for developers
 MPE IP data router
 TCP/IP Ethernet protocol
 FTP Client-Server (Concurrent)
 EMT (ADTEC LAN Multicast protocol)
 FCMP Client (File Control Multicast Protocol)
 Supports control and data distribution via the Internet
 Supports NTSC, PAL, PALN and PALM standards
 Time Clock with NTP capabilities
 Vertical Blanking Interval bypass for Teletext insertion
 Manual and Automatic Traffic and Billing interface
 Front panel Decoder and Receiver LED status
 Keypad with front panel LCD
 Scheduling and Play list support
 ADTEC embedded real time operating system
 Universal input power supply
 NOT PC based
 1 rack unit chassis
 CE certification

(* Please note the required encoding parameters under the specifications and check our web site for updated file support.

All features subject to change without written notice.

Specifications

Satellite DVBridge (Optional)

Burst rates to 45 Mbits/s.
 Multi Protocol Encapsulation (MPE)
 Four (4) internal or IP bridge services
 PID selectable
 QPSK
 Forward Error Correction
 Viterbi (1/2, 2/3, 3/4, 5/6, 6/7, 7/8)
 Reed-Solomon (204/188)
 MCPC / SCPC
 Input Freq.: 950-2150 MHz (L-band)
 Adj. in 22KHz steps
 Input Impedance: 75 Ohm Terminating
 Input Levels: -20 to -65 dBm per carrier
 LNB Power: 14v, 18v or Off
 Current and Voltage protection

MPEG 2 ISO-13818

System and Program Streams
 GOP of 1 to 15, Full IBP, IP or I only
 Data rates from 1 to 15 Mbs
 MPEG Layer 1 and Layer 2 Audio
 Sampling rates of 48 kHz only
 Mono, Dual Mono, Stereo or Joint Stereo
 Data rates supported for Layer 1
 32 Kbits/s to 448 Kbits/s in 32 K steps
 Data rates supported for Layer 2
 64, 96, 112, 128, 160, 192, 224, 256, 320, 384 Kbits/s

MPEG 1 ISO-11172-2

System Stream (Hard Drive Only)
 GOP of 1 to 15, Full IBP, IP or I only
 0.50 Mbs to 5 Mbs
 MPEG Layer 1 Audio
 Sampling rates of 48 kHz only
 Mono, Dual Mono, Stereo or Joint Stereo

Standards, Resolutions and Color Frequency

NTSC
 720-480, 30 fps, Full D1
 352-480, 30 fps, Half D1
 352-240, 30 fps, SIF
 Color Frequency: 3,579,545 Hz
PAL
 720-576, 25 fps, Full D1
 352-576, 25 fps, Half D1
 352-288, 25 fps, SIF
 Color Frequency: 4,433,618.75 Hz
PAL-M
 720-480, 30 fps, Full D1
 352-480, 30 fps, Half D1
 352-240, 30 fps, SIF
 Color Frequency: 3,575,611.49 Hz
PAL-N
 720-576, 25 fps, Full D1
 352-576, 25 fps, Half D1
 352-288, 25 fps, SIF
 Color Frequency: 3,582,056.25 Hz

SDI Video Input (Supports embedded AES-EBU)

SDI Channel Video, BNC

Video Outputs (Supports embedded AES-EBU)

SDI Video 1, BNC,
(Relay bypass protection)
 Analog Video, BNC
(Channel and Content Preview output)
 Analog Audio, 5 Pin RST
(Channels are user defined, 1&2 or 3&4)

SDI Video Switcher

SMPTE 259M-C Compliant
 Vertical Interval: Line 10 NTSC and Line 6 PAL
 Input Impedance: terminating to 75 \square
 Nominal Input Level: 0.8 V p-p
 Output Impedance: terminating to 75 \square
 Nominal Output Level 0.8 V p-p
 Return Loss \square 15 dB to 270 MHz
 Throughput Delay: 350 ns

AES-EBU Audio Switcher

AES-EBU Audio, BNC embedded with video
 SMPTE 272M A, B, C Compliant
 48 KHz Synchronous Sampling Only
 Passes all 15 embedded channels
 Inserts Stereo Audio only (2 CH) on 4 channels

Auxiliary Cue Input

Auxiliary GPI, 5 Pin RST (Tally), NO/NC CC

Tally Outputs

NO, NC, OA (Open Collector Grounding), 5 Pin RST

Communications

RS232 DCE, RJ-11 Loop Through
 Baud, 300 to 1,036,800
 Data, 7, 8
 Stop, 1, 2
 Parity, Odd, Even, None
 Ethernet (Telnet, FTP and FCMP)

Networking

100 Base T

Protocols:

TCP/IP, UDP, SDP, SAP
 Ethernet Multicast Transfer (EMT)
 (Adtec proprietary physical layer multicast, LAN only)
 File Control Multicast Protocol (FCMP)
 (Adtec proprietary Satellite UDP multicast)

Services:

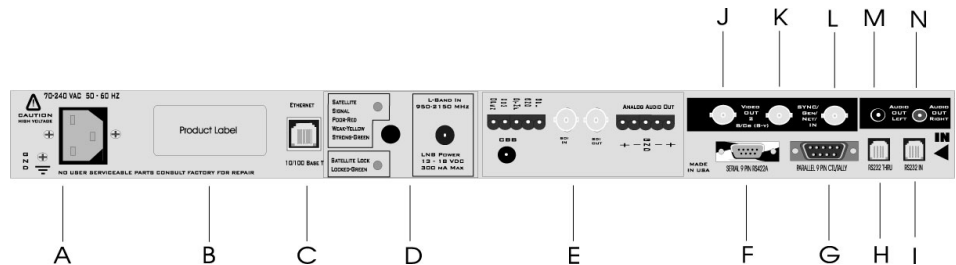
FTP Client/Server, Telnet, FTP Push and Pull with Passive Mode support
 Support Gateways, User Name and Password Security, Stealth IP Address, virus immune OS LAN/WAN and Satellite data and control

Front Panel User Interface

LCD Display, 16 by 2 backlight
(Contrast control via cursor up and down keys)
 Key Pad, Mode, Escape, Enter, Select, Cursor LED's, Power, Video, Drive, Link, Busy

Physical and Operational

1 Rack Unit
 19" 1.75" 14" (WHD)
 482 mm 44 mm 355 mm (WHD)
 70-240 VAC 50-60 Hz
 65-Watts maximum power consumption
 50/90 Degrees F, 30/70 RH
 CE Certified



Soloist2-S SDI Rear Panel IO

Label	Description	Label	Description
A	AC Main Power In	H	RS232 Out (Loop)
B	Product Label Area	I	RS232 In
C	Fast Ethernet RJ-45	J	Composite Video Out (1)
D	L-Band Input and LED indicators (Optional)	K	Composite Video Out (2)
E	SDI IN/Out Cue and Tally	L	Sync or Genlock In
F	RS 422 Control Port	M	Unbalanced Audio Out
G	Parallel IO and Control Port	N	Unbalanced Audio Out