ADTEC Digital

Soloist 2
Broadcast MPEG2 Player

Overview

The Soloist 2 has a reputation as the premier decoder for multi-media professionals. It plays studio quality full D1 MPEG at encoded rates to 15 Mb/s. Along with balanced audio, it delivers crisp video signals to SDI digital video and RGB, YUV, Y/C and Composite analog video outputs. The Soloist 2 offers professionals a toolbox of features and capabilities that have been designed and field-tested by world-class multimedia application engineers for over 3 years.

Soloist2-DVD

Benefits

> Ultra High Reliability

As an embedded system, the Soloist 2 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. The PC ritual of re-booting is unheard of.

> Exceptional Performance

The Soloist 2 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 Soloist 2 is ready to run intended for 24-7-365 operation; nothing compares!

> Easy Integration

As a stand-alone solution or component part in any type of system, the Soloist 2 is adaptive. Its small footprint, large storage capacity, low power consumption and flexible interfaces make it highly versatile. From broadcast to cable to demanding professional audiovisual applications, there really is no equal to the Soloist 2.
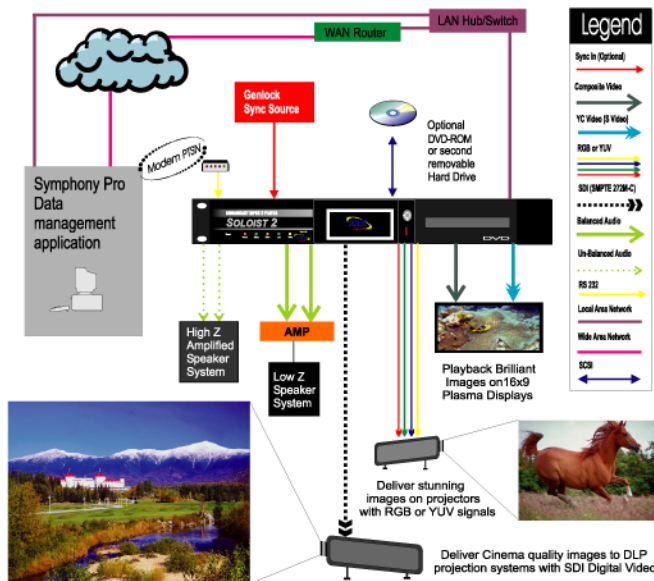
> Every Output

The Soloist 2 adapts to virtually any display technology. Its analog outputs include standard Composite, YC, RGB, and YUV (Component) video. Optionally, add SDI (Serial Digital Video) to integrate into the very high-end display technologies. Audio outputs include balanced and unbalanced stereo.

Availability

The Soloist 2 is available in a rugged 1 RU steel case. Options include storage upgrades to 160 GB, CDROM, DVD, SDI video only output, and a seamless pass-through video switch for Composite (Soloist 2S) or SDI with embedded AES EBU audio (Soloist 2S-SDI).

Soloist 2 MPEG 2 Playback System with Analog and Digital output options

Soloist 2 Broadcast MPEG2 Player

APPLICATIONS

- Unlimited channel Synchronous playback (Video Walls and Multiple Projector applications)
- Digital Cinema
- Cable Local Origination playback
- Broadcast long form playback
- Hospital education and entertainment channels
- Large projector presentations (SDI, YUV or RGB)
- High-end entertainment venues
- Kiosks and Interactive displays
- Museums and Theme Parks
- Automation with AMX, Crestron, VDBS, Dataton, Vity and others

FEATURE HIGHLIGHTS

- Broadcast quality Full D1 MPEG 2
- MP@ML decoding up to 15 Mega bits per second
- Supports Constant and Variable bit rate encoding
- Supports all half D1, three quarter D1 and SIF resolutions
- Supports NTSC, PAL, PALN and PALM standards
- Frame accurate synchronous playback via MPEG STC time code
- Composite, YC, RGB and YUV analog video
- Optional SDI (ITU-R601) digital video
- Genlock for external color and video timing synchronization
- Balanced and unbalanced analog audio
- Optional built in Composite (Soloist 2S) or SDI switcher (Soloist 2S-SDI)
- Large internal storage capacity with external SCSI port
- CD ROM, DVD, Jaz drive and removable hard drive support
- MPEG File Encryption
- Incremental channel based design
- FTP Server and Client (Concurrent)
- EMT (ADTEC high speed Ethernet multicast protocol)
- Satellite data distribution (FCMP)
- Time Clock with NTP client
- Interface and File playback verifications
- Supports NTSC, PAL, PALM, PALN video standard
- OSD, On Screen Display with support for 24 bit color BMP
- BMP scaling and color reduction with alpha blending
- OSD Crawl with three dwell speeds and alpha blending
- Support for Optibase UDP Ethernet broadcast decoding
- Extensive control and scripting functionality nearly eliminates need for external controllers
- Robust developer API with over 120 scripted commands
- Automatic "Shadow" commands for STC based event triggers
- ADTEC VTOS embedded real time operating system
- NOT PC based
- 1 rack unit chassis
- CE certification

SPECIFICATIONS

Decoding Standards
MPEG 2 ISO/IEC 13818 MP@ML
MPEG 1 ISO/IEC 11172

Decoding Data Rates
MPEG 2 1 to 15 Mbits/s
MPEG 1 400 Kbits/s to 5 Mbits/s

Decoded Streams
MPEG 2 Program (CBR or VBR) or System
MPEG 1 System
Elementary streams are not supported.

Pictures Structure
I, IP, IBP, GOP from 1 to 15

Video Resolution NTSC
Horizontal: 720, 704, 640, 480, 352
Vertical: 480, 240
Color Frequency: 3,579,545 Hz

Video Resolution PAL
Horizontal: 720, 704, 640, 480, 352
Vertical: 576, 288
Color Frequency: 4,433,618.75 Hz

Video Resolution PAL-M
Horizontal: 720, 704, 640, 480, 352
Vertical: 480, 240
Color Frequency: 3,575,611.49 Hz

Video Resolution PAL-N
Horizontal: 720, 704, 640, 480, 352
Vertical: 576, 288
Color Frequency: 3,582,056.25 Hz

Video Sampling
4:2:0

Audio Type and Sampling
MPEG Layer 1 and Layer 2
44.1 KHz, 48 KHz
Mono, Dual Mono, Stereo or Joint Stereo

Audio Data Rates
MPEG Layer 1: 32 Kbits/s to 448 Kbits/s in 32 K steps
MPEG Layer 2: 64, 96, 112, 128, 160, 192, 224, 256, 320, 384 Kbits/s

Platform
ADTEC Embedded system with:
Motorola Cold Fire 32 Bit RISC CPU
ADTEC Real Time Deterministic OS
10 Base T Ethernet
TCP/IP With FTP Server and Client
EMT (ADTEC Ethernet Protocol)
Serial RS422, RS232 (Loop through)
Parallel (4 Bit, BCD)
Four IDE drive host interface
SCSI 2 (Narrow) drive host

Analog Video Outputs
Composite (2 BNC, 75 Ohm)
YC (4 Pin Din or 2 BNC, 75 Ohm)
RGB (4 BNC, 1 Composite Video, 75 Ohm)
Component (YUV, 4 BNC, 1 Composite Video, 75 Ohm)

Analog Video Inputs
SYNC on Green (Hardware Options)

Analog Audio Outputs
Unbalanced Stereo (2 RCA, 56 K Ohm)
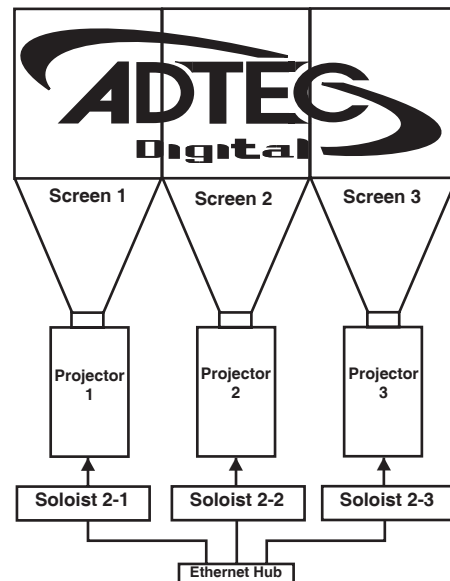Balanced Stereo (2 RST, 600 Ohm)

Digital Video Outputs
ITU-R601 (SDI, Hardware Option)
(No embedded audio support)

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

Features and specifications are subject to change without written notice

Unlimited channel synchronous frame accurate playback using MPEG System Time Clock (STC) Time Code packets via Ethernet