







Solid State Logic

Integration I/O.

Versatile, Low Cost, High Performance Audio I/O, Routing and Conversion

Solid State Logic has been at the forefront of audio technology design and manufacture for more than 35 years. Today SSL manufactures a range of innovative analogue and digital audio consoles which set quality standards for Broadcast, Music and Post Production. The SSL I/O range provides a collection of problem solving units which can be specified as 'glue' products as part of larger systems which may include SSL consoles or can be combined to create stand-alone SSL LogictivityTM based intelligent audio networks. The SSL I/O range is designed to enable Systems Integrators to create professional, cost effective solutions for a broad range of clients including; Fixed Broadcast Installations, Broadcast Production Trucks, Location Recording Trucks, Houses Of Worship, Live Entertainment Venues, Theatres, Film & TV Post Facilities, High End Home Theatre and Music Production Suites.

The SSL I/O range consists primarily of a collection of MADI based products; the **MADI-X8** low cost MADI Router, **SDI-MADI** 3G SDI to MADI de-embedder, **Alpha-Link** MADI/AES/Analogue audio format converters, **Delta-Link** MADI/Pro Tools TDMTM converter, **MADI Opti-Coax** MADI Fibre to Copper converter and **MADI MadiXtreme** PCIe audio interfaces. SSL Products have a reputation for benchmark audio performance, high quality manufacture and reliability. SSL product experts provide excellent pre sale support and advice and we have an unrivalled reputation for post sales support through SSL Offices Worldwide and our Global Distributor Network.

About MADI

The SSL I/O Range makes extensive use of MADI multi channel digital audio transmission over fibre optic cable. MADI technology, standardised by the AES in 1991, was developed jointly by SSL, Sony, and Studer. Since then (and especially in recent years) it has become a widely accepted standard. MADI provides up to 64 channels of audio transmitted down a single optical cable for up to 1.3 miles /2kM. It has Near Zero Latency and delivers fully transparent Audio Distribution without any degradation of the Audio Signal. MADI can pass Remote Control Data for SSL's Alpha-Link 8RMP units and Remote Control protocols used by other manufacturers.

For more information about SSL I/O products, visit www.solidstatelogic.com Detailed Product Specifications and Documentation are available from SSL.

SDI-MADI

Cost Effective 3G SDI Audio De-Embedder

Four Auto Sensing SDI Inputs to MADI and AES Digital Audio Outputs

The SSL SDI-MADI is a cost-effective solution to the problem of connecting audio equipment to the SDI-based infrastructure found in many broadcast facilities today. Occupying only 1U of rack space, the SDI-MADI provides the interface between SDI video bitstreams and digital audio. SDI-MADI extracts up to 16 audio channels from each of the unit's four SDI inputs to provide a total of up to 64 audio channels in both MADI (AES10id-2008) and AES3 (AES3-1992) formats. All SDI inputs independently auto-sense between 3G, HD and SD standards and are provided with loop-through connectivity for downstream equipment.

With a comprehensive range of synchronising options and switchable sample rate convertors, the SDI-MADI is designed to reliably and seamlessly integrate into any broadcast environment where SDI-embedded audio channels require format conversion.



Key Features

- 4 x SDI inputs on 75 Ω BNC connection. 16 audio channels per input
- Auto-detection of SD/HD/3G input format
- Active loop-through of each input to 75 Ω BNC output connection
- Full Dolby® E/Dolby® Digital transparency for loop through
- 32 x AES digital audio output via 37 pin D-Sub
- Dual 64 Ch MADI digital audio output via ST Multimode Optical and Coax
- Front Panel LED status indication for PSU, SYNC, SRC and SDI Lock
- Comprehensive sync options (Wordclock, AES, Black and Burst, SDI1 4)
- Wordclock and AES sync outputs
- On-board sample rate convertors (SRCs), enabled locally or remotely via GPI
- Dual power supplies, with separate IEC mains connectors
- Optional 19" AES Signal Breakout panel providing AES3-id outputs on 32 x BNC connectors (75 Ω)

MADI-X8

The Heart of your Intelligent Audio Network

Versatile And Cost Effective 8 Port MADI Router/Splitter System

MADI-X8 is an affordable, powerful and versatile MADI routing system. In addition to offering simple **point to point bulk routing**, MADI-X8 offers **Source Distribution** (one source to many destinations), **Device Splitting** (any combination of individual channels to any destination) and **Source Aggregation** (a single 64 Ch output consists of any combination of channels from various inputs). MADI-X8 is therefore a unique low cost solution to audio distribution and aggregation challenges in a wide range of applications including; Broadcast Production Studios and OB Vehicles, large scale Film/Game Scoring, multi room studio complexes requiring real time asset sharing and Live Sound.

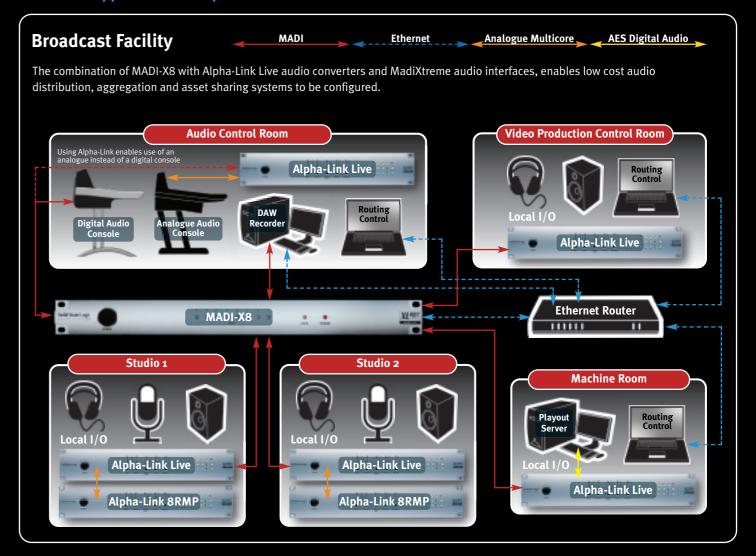


The MADI-X8 is a 1U unit with 8 MADI I/O. It provides a 512 x 512 point routing matrix controlled by cross-platform SSL Logictivity™ Browser software. The Browser makes creation of even the most complex routing configurations very straightforward. The MADI-X8 hardware can store up to 128 Presets and continues to function when the Logictivity™ Browser is disconnected. MADI-X8 can act as a Master clock source or as a clock distribution system via its MADI and/or Word Clock connections. It has Intelligent Clock Sensing with Auto Failover which can monitor both a Primary Master Clock and a Secondary Clock source and switch automatically should the Master Clock source fail. Up to four MADI-X8 units can be controlled by a single browser and multiple browsers can control a single MADI-X8 over a wired or wireless network.

Key Features

- 8 MADI I/Os (6 x Optical and 2 x Coax). 1 x Wordclock In, 3 x Wordclock Out
- Versatile Point To Point, Source Distribution, Source Splitting and Source Aggregation
- Straightforward set up via Intuitive cross platform Logicitivty™ Browser software
- Preset based recall of partial or full routing set ups
- Ethernet browser connection. Controllable over Wi-Fi and Internet
- Efficient and simple Network setup using Multicast DNS Auto Unit Discovery (Bonjour)
- Logictivity™ browser can access up to 4 MADI-X8 Units simultaneously
- Multiple Logictivity[™] enabled MAC's and PC's can access the MADI-X8 simultaneously
- Dual Master Clock Source (Internal, Word Clock or MADI Input A-H) with Auto Failover
- 512 x 512 Ch@48kHz, 256 x 256 Ch@96kHz, 128 x 128 Ch@192kHz cross point matrix
- Independent MADI Mode Operation (56/64 CH Mode, Legacy/Frame Pattern) per MADI I/O
- Full preservation of 'Control over MADI Data' (depending on the Data Protocol)
- Support for Varispeed (+/-10% Varispeed on 56CH Ports only)
- Ultra Low MADI Roundtrip Latency; 4 samples (44.1/48Khz), 8 samples (88.2/96Khz), 16 samples (176.4/192Khz)

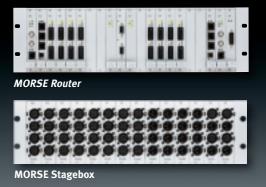
MADI-X8 Application Example



MORSE

For more sophisticated installations with SSL digital consoles, where absolute security is a premium, SSL offers the MORSE Router and MORSE Stageboxes, providing choice between 2048 x 2048 and 4096 x 4096 cross-points, with full Hot-swappable technology and full mirror-based redundancy as an option.

Please note: MORSE is only available with SSL consoles

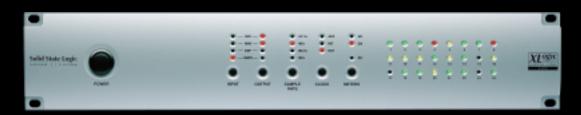


Alpha-Link

Versatile, Low Cost, High Channel Count Audio Converters

Simultaneous MADI I/O To High Quality Analogue and Digital Audio

SSL Alpha-Link is a range of stand-alone 2U rack mount audio format converters that provide Integrators with a versatile, low cost converter solution for a wide range of applications. They provide bi-directional conversion between 64 channel MADI fibre I/O, with 24 channels of high quality line level analogue A-D/D-A and 24 channels of Digital I/O (in either AES or ADAT formats) simultaneously. In conjunction with MADI equipped digital audio consoles or Routing systems they provide low cost Local I/O. In conjunction with MADI based computer interfaces (like our MadiXtreme, MX4 or Delta-Link units) they provide high quality, low cost I/O for DAW recording systems.



Alpha-Link Live - Professional MADI to AES Digital and A-D/D-A converter

- 64 Channel digital MADI I/O via SC connectors
- 24 Channel electronically balanced line level analogue I/O
- 24 Channel AES/EBU digital I/O
- Dual Power Supplies

Alpha-Link Live & MADI AX shared features

- SSL enhanced A-D/D-A at up to 96kHz
- D-Sub connectors for analogue and AES connection
- Word Clock input and output
- Connects to Routers, consoles & I/O interfaces via MADI optical fibre

Alpha-Link MADI AX - Professional MADI to ADAT Lightpipe and A-D/D-A converter

- 64 Channel digital MADI I/O via SC connectors
- 24 Channel balanced line level analogue I/O
- 24 Channel ADAT Lightpipe digital I/O
- Use all input & output channels simultaneously in any configuration
- Comprehensive input/output routing & mode selection matrix
- Analogue input/output activity indication via 24 tri-colour LEDs

| Audio Interface | Sample Rate and Mode | | |
|-----------------|---|-------------------|-------------------|
| | Fs | 2Fs (Legacy/SMUX) | 2Fs (High Speed) |
| ADAT | 24 Channels | 12 Channels | n/a |
| AES/EBU | 24 Channels | 12 Channels | 24 Channels |
| Analogue | 24 channels - irrespective of sample rate | | |
| Expansion Port | 64 channels - irrespective of sample rate | | |
| MADI | 56 or 64 Channels | 28 or 32 Channels | 28 or 32 Channels |

Alpha-Link 8RMP

Eight Channel Microphone Pre-Amplifier

Superior Quality SSL Microphone Pre-Amplifiers

The Alpha-Link 8-RMP is a 2U rack unit offering 8 high quality analogue microphone pre-amplifiers. The unit is primarily designed to interface – via an Alpha-Link LIVE I/O unit – with an SSL C10 HD or C100 HDS Digital Broadcast Console. When used with a C10 or C100 console the 8RMP is remotely controllable but the unit may also be controlled locally using the front panel switches and indicators, providing the user with flexible control options for a wide range of Local I/O applications.

Key Features

- Eight rear panel mic/line combi XLR/Jack inputs
- Eight line level outputs via 25way D-Sub
- 65dB variable gain
- 2odB pad
- Switchable +48V phantom power
- · Gain and overload condition indications
- Dual power supplies



MADI Opti-Coax

The SSL 'MADI Opti-Coax' is a handy format converter box designed to convert up to 64 audio channels bi-directionally (64 IN & 64 OUT) between the MADI Optical and MADI Coaxial formats. Its front panel is equipped with one set of MADI SC type optical input & output connectors and one set of MADI BNC coaxial input / output connectors.

Conversion takes place in real time with no latency and no audio degradation. In addition to simple format conversion MADI Opti-Coax can be used to extend cable distance coverage from 50m for the MADI Coax format to 2km for the MADI Optical format. MADI Optic-Coax is housed within a rugged all metal case and is extremely simple to use.

Key Features

- MADI optical to coax converter
- MADI coax to optical converter
- Real time operation (no latency)
- Extends your MADI distance coverage: from som (coax) to 2km (ontical)



MadiXtreme

PCIe MADI Digital Audio Interface

High Channel Count MADI I/O from a Single Multi-Client PCIe Card

Featuring our revolutionary PCIe-Core Audio Pipeline technology, MadiXtreme is one of the first audio devices to take full advantage of the high speeds and incredible bandwidth offered by the PCIe bus on modern computers. The drivers are fully multi-client capable (allowing several applications to simultaneously access the device) and allow multiple cards per system.



MadiXtreme 64

With one optical MADI connector for 64 simultaneous I/Os, the MadiXtreme 64 is the ideal interface for the SSL Alpha-Link audio converters. MadiXtreme 64 is also the perfect partner for MADI-equipped consoles, live recording, installations and broadcast servers.

- PCIe half-length card, single-lane PCIe v1.1-3.0
- 1 x MADI I/O (optical)
- Channel count: 56/64 Ch@44.1/48k, 28/32 Ch@88.2/96k, 14/16 Ch@176.4/192k
- 1 x Wordclock connector (software controlled as Input or Output)

MadiXtreme 128

With two optical MADI connectors for 128 simultaneous I/Os, the MadiXtreme 128 can be connected to two SSL Alpha-Link MADI AX or SSL Alpha-Link Live at the same time.

Both MADI ports can also be used as redundant multichannel feeds and in applications that need a high number of I/Os in recording, mixing or playout.

- PCIe half-length card, single-lane PCIe v1.1-3.0
- 2 x MADI I/O (optical)
- Channel count: 112/128Ch@44.1/48k, 56/64Ch@88.2/96k, 28/32 Ch@176.4/192k
- 1 x Wordclock connector (software controlled as Input or Output)

Minimum System Requirements

Windows: Windows XP (SP3) or Vista (32/64 Bit) or Windows 7 (32/64 Bit) Intel or AMD Configuration. One free PCle Slot

Mac OS X: 10.4 (Tiger) or 10.5 (Leopard) or 10.6 (Snow Leopard 32/64 Bit) G5 (10.4 or 10.5 only) or Intel Mac. One free PCle Slot

Note: PCIe (PCI Express) is not compatible with PCI or PCI-X

MX4

Groundbreaking Audio I/O and Processing System

High Channel Count MADI I/O and DSP Powered Software Mixer with SSL Processing

MX4 combines three central system elements; a very high channel count/high quality audio interface – an extremely versatile Software Mixer – and DSP powered plug-ins. MX4 is the ideal system for audio professionals seeking solutions for complex and demanding recording and mixing environments. The 128 channel MADI I/O can be combined with SSL Alpha-Link audio format converters, or connected directly to suitably equipped consoles, or integrated with Broadcast Routers to deliver a very high channel count, with uncompromising audio quality. The MX4 flexible mixer architecture, true multi client operation and stunning 'near zero' latency creates a powerful system with the versatility to create multiple (or duplicate) multi channel record feeds, multiple headphone/artist monitor feeds or Mix Minus monitor feeds in Broadcast applications. SSL channel EQ, Dynamics and Bus Compressor plug-ins provide console grade precision processing with legendary SSL audio characteristics to meet all processing requirements, with DSP power ensuring that processing is available even at high channel counts.

Key Features

- 128 channel MADI Digital Audio Interface dual 64 channel MADI optical fibre I/O connections
- SSL Software Mixer near zero latency, sophisticated routing & monitoring options
- SSL channel EQ, Dynamics and Bus Comp plug-ins DSP powered legendary SSL sound inside the box
- Multi-client architecture next generation multi-processor optimised, multi-client drivers
- Includes free fully functional 16 track version of Soundscape V6.0 DAW

Please note: MX4 is a Windows PC only device



Delta-Link

XLogic MADI to Pro Tools I HD® Converter

64 Channels of Digital I/O Direct to Pro Tools I HD®

With XLogic Delta-Link MADI HD any Fibre Optic MADI based audio equipment such as routers, digital mixing consoles and converters can now be directly interfaced with Pro Tools I HD®, providing simplified interconnectivity and significant cost reductions and eliminating the need for complicated format conversion workarounds.



MADI HD Reduces Costs

A single Delta-Link MADI HD can take the place of up to four Digi 192® Digital I/O's, delivering dual feeds of 64 channels of digital audio interconnection from a single hardware interface. MADI HD further reduces cost by using an efficient single cable interconnect system. It also occupies significantly less physical rack space than equivalent systems.

Simpler System Setup and Integration

Direct connectivity between Pro Tools® DSP cards and MADI cards means efficient, simple system configuration. Fibre Optic MADI allows distances up to 1000m between the Pro Tools® system and other MADI equipment. Remote audio routing to and from Pro Tools® is possible in conjunction with MADI routing equipment.

Key Features

- 2 Primary port interfaces (32 channel each) to a Digidesign Pro Tools | HD® card
- 2 optical MADI ports
- Each MADI port offers 56 or 64 MADI digital inputs & outputs at up to 48kHz, 28 or 32 MADI digital inputs and outputs at up to 96kHz, 14 or 16 MADI digital inputs and outputs at up to 192kHz
- Word/SuperClock input
- MADI ports A and B can be used to provide two mirrored 64 channel I/O feeds
- The latency generated by the Delta-Link MADI HD itself is limited to 1 sample (MADI Out) and 1-2 samples (MADI In).

Analogue Processing & Mixing

X-Rack

Much of the technology from our analogue console range is available in our modular **X-Rack** includes a range of ten different modules include versatile, high quality front end with our SuperAnalogue Mic Pre or our unique VHD Input Module, a range of different styles of channel EQ & Dynamics Processors, the classic SSL Stereo Bus Compressor, and a range of 'Line Input' modules that enable up to 56 input sub mixers to be configured.



X-Desk

The **X-Desk** is a compact 7U mini SSL analogue line mixer. With 8 faders, 16 inputs a fully featured monitoring and Talkback system and pristine SSL audio quality X-Desk is an ideal sub mixer or back up mixer in a broadcast environment. X-Desk is designed to partner X-Rack and is supplied with a 19" rack mount kit.



Alpha-Channel & VHD Pre

The VHD Input system is also available in the **Alpha-VHD Pre**, a 4 mic pre 1 U rack. The **Alpha-Channel** provides a high quality 1 U channel strip.



Y-Patch

X-Patch is a software controlled analogue patch bay. It provides a 16 mono x 16 mono 100% analogue router controlled by cross platform SSL Logictivity ™ Browser Software.











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