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For Immediate release

NAB 2013 – SOUND4 Will launch again new products!

See us on SOUND4 booth - French Pavilion, Central Hall #C2952
and ALC NetworX (Ravenna) booth #C1311

SOUND4 introduce “ULA”, the Universal Lan Audio

What is ULA?

ULA means “Universal Lan Audio”, in few words this is not a new standard, but a “compatible concept” where audio IP sources from different standard are now compatible and exchangeable. With ULA, we can catch a Livewire source and send it in Ravenna network... Thanks’ to ULA, sources from different standard are fully cross compatible. For now, ULA integrates 2 standards (Livewire and Ravenna*), we will add more standards soon.

A good news for SOUND4 customers: All SOUND4 products (PCIe cards) are now ULA compatible.

SOUND4 ULA 8-Playout

The **U**niversal **L**an **A**udio Playout Card (Ravenna & Livewire compatible*)

What is the scope of SOUND4 ULA 8-Playout?

This card is mainly used as a sound card to directly play to Lan Audio (Livewire or Ravenna*). Of course it is also possible to record from Lan Audio. This card is dedicated to OEM Integrators who also need advanced functionalities, like Mix Engine and 3D matrix audio.

What is the capacity of the cards?

- 8 Stereo inputs (Play)
- 8 ULA Inputs (Livewire or Ravenna*)
- 8 Stereo outputs (Record)
- 8 ULA Outputs (Livewire or Ravenna*)

What is the difference with a software driver solution?

- Low Latency: 1.3ms

- ULA compatible (Ravenna & Livewire*)
- Stability: this is a hardware solution!
- 3D Matrix
- Mix Engine built in
- 100% Link&Share compatible!

3D matrix, what for?

Until now the principle of operation of an audio matrix was to connect the inputs and outputs by their crossover points in a grid. This is the classic mode: “two dimensions” (input to output).

With the 3D mode, SOUND4 introduces a notion of priority in the Matrix engine. In practice when connecting sources to destinations, it is now possible to define an order of priority, from 1 (lowest) to 9 (highest priority).

It is then possible to establish source scenarios of backup, priority, mixing group directly in the heart of the 3D matrix. The aim is to simplify the task of OEM Integrators. Because operation will be extremely simplified, this new concept invented by SOUND4 will also reduce cost for end users...

A Mix Engine Built In...

The 3D audio matrix has also a Mix Engine with a capacity of 16 inputs to 16 outputs. Cross-fades are assignable separately for each source. Thanks to the 8-ULA SOUND4 Payout, it is no longer necessary to use external mixing engine to mix playout sources with ULA sources (Livewire or Ravenna).

100% Link&Share compatible

The Link & Share is the SOUND4 control protocol, in practice it is a Telnet layer that provides read and write access to all parameters of SOUND4 products. Through Link & Share, the OEM Integrators can directly send commands to one or many other SOUND4 cards. In fact the Link & Share can be seen as a “modern” generation of GPIO...

The screenshot shows the SOUND4 ULA 8-Playout software interface. At the top, it displays the title "SOUND4 ULA 8-Playout" and a "WORKSPACE: [PLAYOUT]" indicator. Below the title is a row of 16 VU meters labeled "Out" with a "Gain" row below them, all showing 0.00. The main part of the interface is a large matrix table with columns for "VU", "Name", "On", "Level", "Fade In", "Fade Out", "Event", and 16 output channels (Pci1-Pci8, Lan1-Lan8). The matrix contains red numbers indicating priority levels for each source-destination connection.

	VU	Name	On	Level	Fade In	Fade Out	Event	Pci1	Pci2	Pci3	Pci4	Pci5	Pci6	Pci7	Pci8	Lan1	Lan2	Lan3	Lan4	Lan5	Lan6	Lan7	Lan8
Pci1	[VU]	Rock FM - Pub New York	<input checked="" type="checkbox"/>	0.00	0.00	3.00	Play	3								3							
Pci2	[VU]	Rock FM - Pub Philadelphia	<input type="checkbox"/>	0.00	0.00	3.00	Play		3								3						
Pci3	[VU]	Rock FM - Pub Allentown	<input type="checkbox"/>	0.00	0.00	3.00	Play			3								3					
Pci4	[VU]	Urban FM - Pub New York	<input checked="" type="checkbox"/>	0.00	0.00	3.00	Play				3								3				
Pci5	[VU]	Urban FM - Pub Philadelphia	<input checked="" type="checkbox"/>	0.00	0.00	3.00	Play					3								3			
Pci6	[VU]	Jazz FM - Pub New York	<input type="checkbox"/>	0.00	0.00	3.00	Play						3										
Pci7	[VU]	Jazz FM - Pub Philadelphia	<input type="checkbox"/>	0.00	0.00	3.00	Play							3									
Pci8	[VU]	Jazz FM - Pub Allentown	<input type="checkbox"/>	0.00	0.00	3.00	Play								3								
Lan1	[VU]	Rock FM@NY	<input checked="" type="checkbox"/>	0.00	0.00	3.00	Always	2	2	2						2	2	2					
Lan2	[VU]	Urban FM@NY	<input checked="" type="checkbox"/>	0.00	0.00	3.00	Always				2	2							2	2			
Lan3	[VU]	Oldies FM@NY	<input checked="" type="checkbox"/>	0.00	0.00	3.00	Always					2									2		
Lan4	[VU]	Jazz FM@NY	<input checked="" type="checkbox"/>	0.00	0.00	3.00	Always						2									2	
Lan5	[VU]	POP FM@NY	<input checked="" type="checkbox"/>	0.00	0.00	3.00	Always							2									2
Lan6	[VU]	Backup Rock FM@NY	<input checked="" type="checkbox"/>	0.00	0.00	3.00	Always									1	1	1					
Lan7	[VU]	Backup Urban FM@NY	<input checked="" type="checkbox"/>	0.00	0.00	3.00	Always												1	1			
Lan8	[VU]	Backup Jazz FM@NY	<input checked="" type="checkbox"/>	0.00	0.00	3.00	Always																1

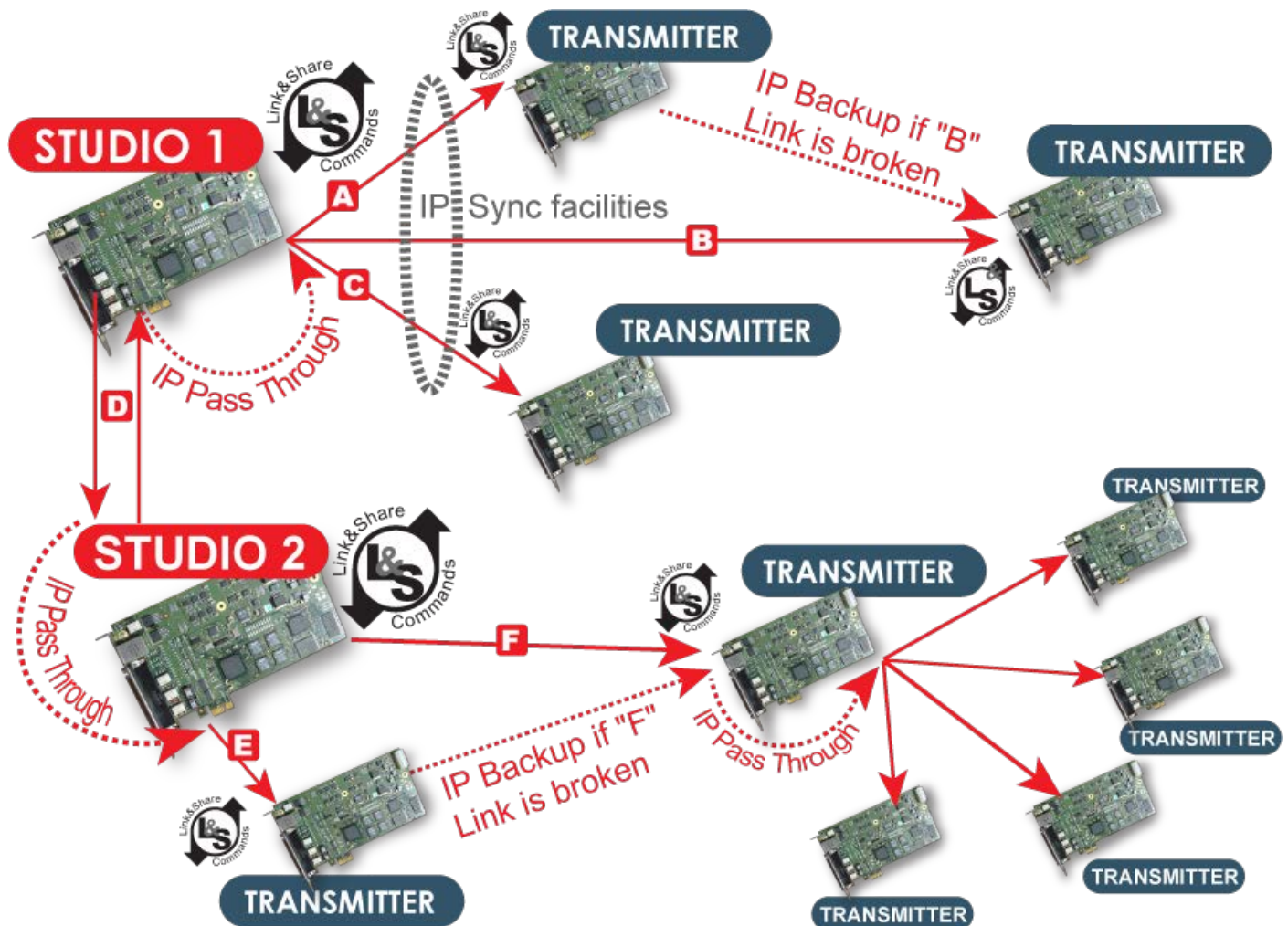
At the bottom of the interface, there is a status bar showing "Host CPU/Memory 40% 91% | NY Master |".

SOUND4 IP – The Audio Networking Solution

What is the scope of SOUND4 IP?

SOUND4 IP is a complete solution dedicated to dynamic Audio IP Networking. SOUND4 IP is Much more than point-to-point sound streaming...

Have a look at all the AUDIO IP solutions available... Although an essential point, none of these solutions take signal processing into account! None of them allow for synchronization... None of them offer a secure routing in the event of an IP link failure... None of them offer stream duplication without decoding and re-encoding... In many cases, the most commonly used codecs impose significant delays, up to a few seconds... Network architectures are fixed and cannot be adjusted according to the new demands of the broadcasting management...



What is the capacity of a SOUND4 IP card?

A SOUND4 IP can handle up to 32 links, each Link can run a Single way or Duplex transmission. All links are dynamically re-assignable with link&Share protocol, there is no limitation in SOUND4 IP...

Saving operating cost by Bandwidth repartition...

Thanks to IP Pass-Through functionality, it is possible to rebroadcast a link from a receiver without decoding and re-encoding.

This functionality is really appreciated by Broadcasters who need an important bandwidth to deliver IP to many Transmitters. Audio networking is buildable like a tree: from studio departure some links will serve 4 or 5 receivers, then each receiver will rebroadcast without decoding to 4 or 5 others receivers...

A built-In preprocessor to optimize codec's job

As a Sound processor manufacturer, we always pay attention to levels... In SOUND4 IP we have implemented a pre-processor to optimize levels and of course optimize codec's job.

SOUND4 IP is usable in all circumstance, even for live broadcast where levels are not always correctly controlled... Of course, pre-processing is by-passable for users who don't need it!

Secure your links is an obsession for us...

In SOUND4 IP Product, everything is done to offer you tools and functionality to secure and backup links.

Users can set a backup link in case the main one falls down. Moreover, SOUND4 IP is the first Audio Over IP codec which manages Fall-back links with dynamic data assignment. An example: the radio can use ADSL link for main service and IP satellite (2-way) for backup. The main advantage of 2-way sat is cost because it is usually proposed for a limited quantity of data transfer, the disadvantage is also the cost if data transfer is not managed. With SOUND4 IP Fall-back link management, it is possible to start or stop sending data to satellite when it is needed, then the basic subscription for 2-way sat can cover a backup program for more than 20 hours per week which is largely enough!!!

About protocol, codecs & Links capacity...

At SOUND4 we have a solid reputation in Audio over IP, this is the reason why we use our proprietary protocol with our own IP corrections, QOS management... This choice offers the best stability because it is designed for actual technology and realistic line characteristics. Our protocol is based on UDP standard.

About codecs, in SOUND4 IP we provide two types of codec:

- Linear (PCM)
- SOUND4 LD, our own proprietary low delay codec. Adjustable from 64 to 384 kbps.

Our codec is not only low delay, it is also working with low bandwidth (transparent at 128 kbps). SOUND4 LD codec is not an mpeg based codec, it doesn't generate artifacts with mpeg based audio sources.

Concerning Delay, 50 ms for encoding/transport/decoding is an achievable goal on a good SDSL line.

A SOUND4 IP can handle up to 32 links, each Link can run a Single way or Duplex transmission. All links are dynamically re-assignable with link&Share protocol, there is no limitation in SOUND4 IP...

100% Link&Share compatible

The Link & Share is the SOUND4 control protocol, in practice it is a Telnet layer that provides read and write access to all parameters of SOUND4 products.

SOUND4 Panels premiere!

What is a SOUND4 Panel ?

This is a fully customizable virtual keyboard solution.

What is the use of a SOUND4 Panel?

A panel is used to send commands to one or more SOUND4 cards, it can also display meters and status.

What are SOUND4 Panel typical uses?

To change an entry in a card, change an IP route, change the source of an IP encoder, display if a card is receiving the modulation input, display the status of a function, change a preset, change a gain...

Where may SOUND4 Panel be used?

In the technical stage for advanced operations or in studios for simple operations.

Is it possible to connect multiple Panels on multiple cards? Yes there is no limit, one or more cards can receive commands from several different Panels.

How are commands generated by the Panel sent?

SOUND4 Panels use the Link & Share protocol developed by SOUND4, it is a Telnet based protocol.

SOUND4 is Livewire compatible, is it possible to send commands to Axia products? Yes, absolutely! In simple installations without Path Finder Pro, it is possible to send commands or view status directly from a SOUND4 Panel. In a complex system where SOUND4 and Axia products cohabit, there are many advantages to send commands from a SOUND4 Panel ...

Are all SOUND4 products compatible with Panels? Sure, all SOUND4 products are compatible, however an update (free) is required for products delivered before

The Alarm Stacker

The Alarm Stacker is a monitoring application compatible with all SOUND4 products. It allows you to set alarms for many parameters and send them by e-mail. SMS alarm functionality will be implemented soon.

*LIVEWIRE is a registered trademark of Axia Audio, RAVENNA® is a registered trademark of ALC NetworX GmbH and is used here under license

TO DOWNLOAD A PRINT QUALITY IMAGE OF:

1) The card:

http://resource.sound4.biz/COM/PR/SOUND4_NAB2013/sound4_8-playout_card-hr.pdf

2) The ULA 8-Playout print screen:

http://resource.sound4.biz/COM/PR/SOUND4_NAB2013/SOUND4_Playout_Matrix.jpg

FOR MORE INFORMATION:

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ABOUT SOUND4:

SOUND4 designs an innovative range of audio processing HD/FM, multi-channel voice processing**, audio streaming over IP solution and a complete processing and streaming solution for WebRadio bouquets***.*

SOUND4 philosophy is to propose real multifunction products, that's the reason why SOUND4 products are based on some powerful PCI express architectures allowing the integration of several products in the same hardware (HD/FM processing, audio back up, streaming, RDS, audio IP) to reduce cost investments (up to 70% compared to traditional solution), gain in reliability and flexibility. SOUND4 Products are in the 'green way' because they save power consumption, space and reduce heat emission...

* patented technology

** awarded SATIS show Innovation Trophy in Paris and Radio magazine Pick Hit award in Las Vegas

*** awarded Radio World magazine Cool stuff award in Las Vegas