



AUDIO INTERACTIVE

NEWS FOR THE COMMERCIAL AUDIO INDUSTRY

SEPTEMBER 2000 VOLUME 1 ISSUE 8

“AI” EXPANDS WITH MORE CONTENT, NEW FEATURES!

MERIDIAN, MS - We are very excited to debut the new, larger and more informative "Audio Interactive". After only 7 issues, we are expanding. The response to the newsletter has been so positive, that it just made sense to add more content and information. Thanks to all of you who have contributed so far, and especially to those who have written or called with comments. In addition to adding more content, the form will change as well. Up until now, the newsletter has been a single 4-sided sheet of paper folded into a mailer. The new format will be an 8 page 8 1/2 by 11" document. To maximize the mailing, Audio Interactive will be placed in an envelope with other informative materials including cut sheets,

flyers, manuals, catalogs, price lists....whatever appropriate for that month. Now, you will get a "Package from Peavey" every month! Also, as part of our new format, Audio Interactive will have a new monthly column entitled, "The X-Frame Primer". This 2-page feature will detail the new X-Frame88 digital processing unit and all of it's power, features and functionality. This feature is intended to assist the "digital newbie". We realize there are a lot of you out there who haven't done a lot of digital work, and maybe the whole thing is confusing. Hopefully, this feature will help, by revealing the basics behind the mystery of digital. Also, as a part of this feature, we will be

showing real world applications, hookup examples, external control configurations and programming tips to help you get the most out of your MediaMatrix X-Frame88 digital signal processor. Every month, there will be something new for you to learn about this great product. If there is something specific that you would like to know about the XFrame88, or digital audio in general, please let us know. We are more than happy to help.

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FROM THE GENERAL MANAGER

We at Peavey know that over the past several months, your business experience with us has been somewhat trying at times, frustrating at others. A number of issues have played a part in this, from our implementation of our new ERP system (BAAN), and increased growth in sales which has put a severe strain on our capabilities.

That is why we are working very hard to improve your overall business experience with us in the coming months. Here are some of the ways that we are working behind the scenes to help keep your projects and orders on schedule:

- We have doubled our forecasts to keep up with increased demand. Thanks to you, the demand for our products has never been higher. We have implemented new processes to forecast this demand and to provide for safety stock when possible.
- To provide increased availability of products, we have added second and third shifts to our SMT lines. This is the core of our digital manufacturing plant and where most of the AA/MM products

are built. These additional shifts represent a major commitment in resources and is indicative of the desire of management to improve the availability problem.

- AA and MM products have been given priority in those factories that share production capabilities. As you know, Peavey has a large MI product base and we share many production facilities with our MI division, as well as Crest Audio. Where resources are shared, we now have the priority.
- We have increased personnel in the AA/MM division to handle your order and shipping requirements. Again, a commitment in resources. This commitment is being made from the highest levels of the company.

We are pleased to state that the addition of the many new sales representatives to the Peavey family has had a profound effect on the fundamental way we do business.....in other words, it has definitely achieved the desired result....to sell more products! To say that we were fully prepared for the overwhelming growth in sales as a result of this would be incorrect.

In fact, we had no idea that the growth would happen with such magnitude, and at such a rapid pace. For this, we thank you for creating these "growing pains".

Please accept our sincerest apologies for any inconvenience you may have experienced with recent orders or shipments from us. While the measures outlined above are already in place to improve product availability for our customers, we continue to work around the clock to improve our stocking and delivery requirements so that we may all continue to grow together.

Thank you for your business and your patience. We look forward to serving you better in the months and years to come.

George Douglas
General Manager
Architectural Acoustics
MediaMatrix

STANDING ROOM ONLY AT AUGUST MEDIAMATRIX SEMINAR

Once again we are pleased to announce that the MediaMatrix seminar program is going gangbusters. All of our remaining classes are full, and in fact, some are severely overbooked. Our most recent class, MediaMatrix Basic held August 8th-11th was a huge success as a full class of new students learned the fundamentals of MediaMatrix and designing in digital. This class was a good mix of contractors, end-users and sales reps. The photos below are a sam-

pling of the four day class and the enthusiasm displayed by the attendees. We are simply ecstatic at the response we have had this year with our seminar program and would like to say thank you to all who have attended. In response to the overwhelming response, we will be making every effort to expand the class offerings next year. Stay tuned for a class schedule for 2001 in a future issue of Audio Interactive, and remember.....sign up fast!



The rear half of the class listens to a lecture on MediaMatrix. The MediaMatrix lab has 24 computer workstations...one for each student.



Jeff Barnhart & Brian McQuillian of Soundelux Showworks have fun with a system design exercise.



Jason Smith of Monfort Electronics and John Rogers of Acoustical Audio Design listen as MediaMatrix concepts are demonstrated on the classroom video system.



Bill Cramer & Bert Tunks of Ron Tunks Sales working on one of the several "hands-on" class exercises.



"Audio Interactive" Editor and Peavey Operations Manager Will Roland helps Adam Danner and Michelle Yeager from the Hattiesburg MS Convention Center.



Peavey MediaMatrix Product Manager Brent Harshbarger giving a lecture on "Networking for Audio".

PRODUCT MANAGER IN SYNC WITH TECHNOLOGY

This month we are proud to feature another one of our product managers. Brent Harshbarger is Product Manager, MediaMatrix. Brent is responsible for the development, marketing and production of all MediaMatrix branded products. Until recently, Brent was the only product manager in the entire AA department, and previously was responsible for the entire AA line and the AMR product line as well! Now, with the recent addition of 2 additional product managers, Brent now spends his time exclusively with the MediaMatrix product line. Brent has been with Peavey for 6 years, all of those spent in his current position. Prior to coming to Peavey, Brent worked as a manufacturer's rep, a contractor, systems designer, consultant and independent audio guru in his home state of Ohio. With extensive experience in just about all sectors of the audio, video and communications industries, Brent really brings a lot to our team. There aren't many in the industry who can do FOH for a national touring act one day, and design an integrated life safety system and it's associated network infrastructure the next. When Brent isn't busy keeping the digital audio world on it's toes, he enjoys an active church life, his 2 daughters and his wife Lisa, who recently completed the RN pro-

gram at Meridian Community College. Always looking to learn more, Brent is also in a continuing education program, studying computer programming and software engineering. If you have specific questions or issues regarding any aspect of MediaMatrix, or digital audio in general, don't hesitate to call upon Brent for help. We are sure that you will find him to be a wealth of information and of great help to you, your staff and your clients.



AUTOMIX 4 MAKES MIXING EASY AND COST EFFECTIVE

We are nearing final production on a brand new automatic mixer, the Automix 4. This cool little piece is a new addition to the analog product line and is intended for applications where simple automatic mixing is required. This 4 channel unit features internal gain management computers, channel inserts, phantom power, priority, balanced and un-balanced outputs and a unique link bus that allows for expansion. Priced very aggressively, the Automix 4 is a perfect product where you need true hands-off operation of open microphones. With the direct channel outputs, you can also use the Automix 4 as an automatic mic-pre with larger mixers or consoles. This is a powerful feature in systems for houses of worship where automatic microphone functionality is usually combined and/or switched with a full console or small

mixer. The easy to install, one rack space unit will be available soon. To make sure you get yours for Christmas projects, call your regional sales rep today and get a demo, or place an order. You will be hard pressed to find a better automatic mixer in this price range. We are excited about the Automix 4. Check it out!



Architectural Acoustics

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Peavey Architectural Acoustics has grown from our Utility Series products to a full line of sound reinforcement products, including our revolutionary MediaMatrix system. The applications in which our products have been installed have ranged from small office background systems to large systems in auditoriums, theme parks, speedways and stadiums.

- products
- software
- tech notes
- applications
- data files

NEW! Audio Interactive is a new monthly look at what's going on at Architectural Acoustics. [Check it out now.](#)

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WEBSITE UPDATE

We are in the process of updating and re-designing the AA website (<http://aa.peavey.com>). This is a huge undertaking, and will take several months to complete. This is a perfect opportunity for you, our clients to give us your ideas on how the site could be improved. If you have specific suggestions on what you would like to see on the site, please let us know. We want the website to be the primary source for information regarding products, technical information, software, etc. We really want to make our site something that is useful to the everyday sound contractor in need of information. Also on the website is the interactive forums section. Here you will find extremely valuable information from users of Peavey audio equipment from all over the world. In addition to being a part of the audio community, this is a great tool for posing questions on AA product, MediaMatrix technology or audio in general. If you haven't seen this feature, check it out today. Follow the signs to the Forums on the website and click away.

PEAVEY OFFERS AN INTELLIGENT AMPLIFIER SOLUTION

We are very pleased to announce that we are now shipping all versions of the IA Series Power Amplifiers. This series offers many exciting features and lots of options for projects large and small. Currently, the IA Series includes the IA200, IA400, IA800, IA200V, IA400V, IA800V and IA1600. These amplifiers feature high quality sonic performance, low or high impedance output stages and very cost effective pricing. Along with these great sounding amplifiers, we are pleased to offer an integrated amplifier control and monitoring package. This package, which consists of the ACI-485V control module and the accompanying AmpWare PC software provides powerful tools for implementing systems where amplifiers must be monitored or controlled remotely. The ACI-485V provides an RS-485 half-duplex, multi-drop interface for creating a multiple amplifier network. This network can be wired as a stand alone system or in conjunction with a CobraNet audio network using our

CobraNet "Serial Bridging" feature built in to all CAB Series products. This powerful feature allows you to transport the AmpWare data across the CobraNet network, eliminating the need for a separate wiring run. The AmpWare software provides the tools needed to configure, control and monitor up to 256 IA Series power amplifiers on a single RS-485 network. Along with the powerful, yet easy to use interface, AmpWare includes links to the Control Grouping feature within MediaMatrix so that you can create graphical monitoring screens and really use the power of the MM GUI to create powerful control, monitoring and diagnostics tools. If you have never had a chance to hear an IA Series amplifier, now is your chance. After several months of extreme backorders, we have finally caught up with demand. We have good inventory now, and this should continue for several months. Specify an IA amplifier for your next project and increase the performance and value to your client.

Load Fault Correction (LFC™) protects the amplifier against abnormal loads.

CE approved for installations world-wide.

Initialization Protection (IP) protects your loud-speakers from power-up transients.



Front panel LED's for signal presence, clip and protection.

DC protection keeps speaker-killing DC voltages off the outputs.

Integral module bay for intelligent accessories and modules.



Built-In power sequencing port for controlling multiple amplifiers.

Low profile level controls prevent accidental gain changes.

Detachable "Euro" connectors for easy servicing.

Low impedance or 70V output, multiple power options, control and monitoring options, and all of the other features listed above make the IA Series a great choice for any project. Get one in your shop and give it a listen. You will be hard pressed to find this much flexibility and performance in such a cost effective package. If you have any questions about the IA Series products, get on the phone and talk to Mark Pinske, Product Manager for professional amplifiers.

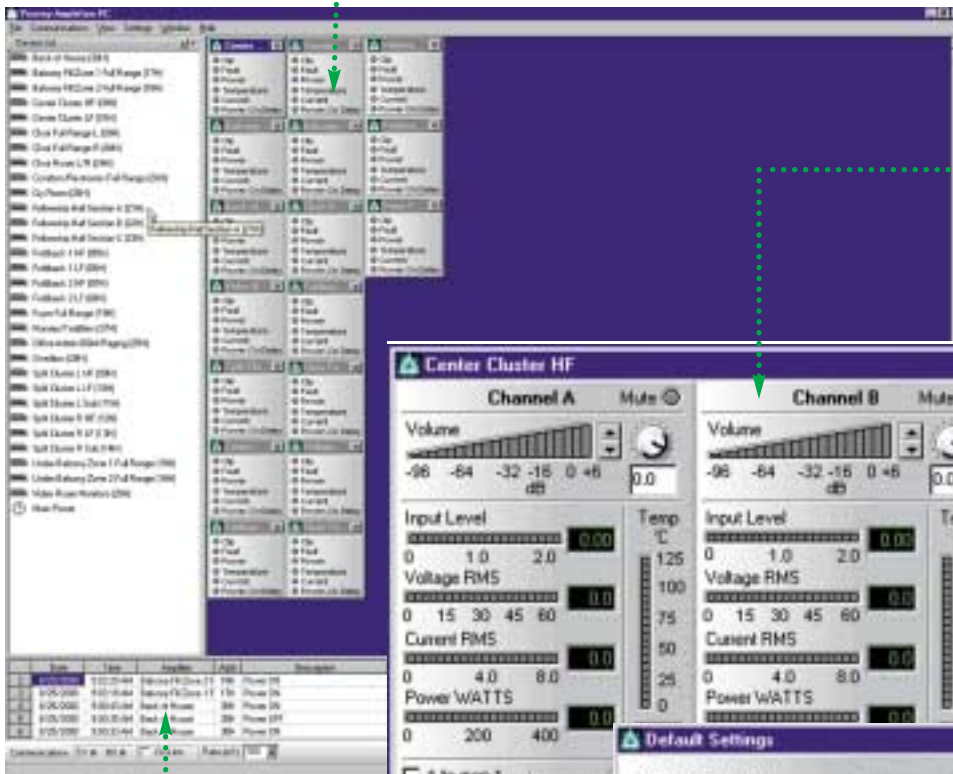
As if the sonic performance, great value and rock solid stability of the IA Series power amplifiers weren't enough, this great product offers even more. The integral module bay provides the option to add the new ACI-485V control and monitoring module to all IA Series power amplifier products. This field installable module provides the ability to remotely control and monitor the amplifier using the new AmpWare PC software on any Windows 95/98/NT based computer. The ACI-485V provides many features, including the ability to sequence power, control the level and mute of each channel, monitor the input level, RMS voltage, current and power of each channel, and even monitor the heat sink temperature. The latest revision of the AmpWarePC software provides even more functionality, including the ability to link key controls and indicators to control objects within the MediaMatrix GUI. This integration of amplifier monitoring, user interface and value makes the combination un-beatable.



Full screen GUI for monitoring multiple power amplifiers.

Control, diagnostics and monitoring for each amplifier in the system.

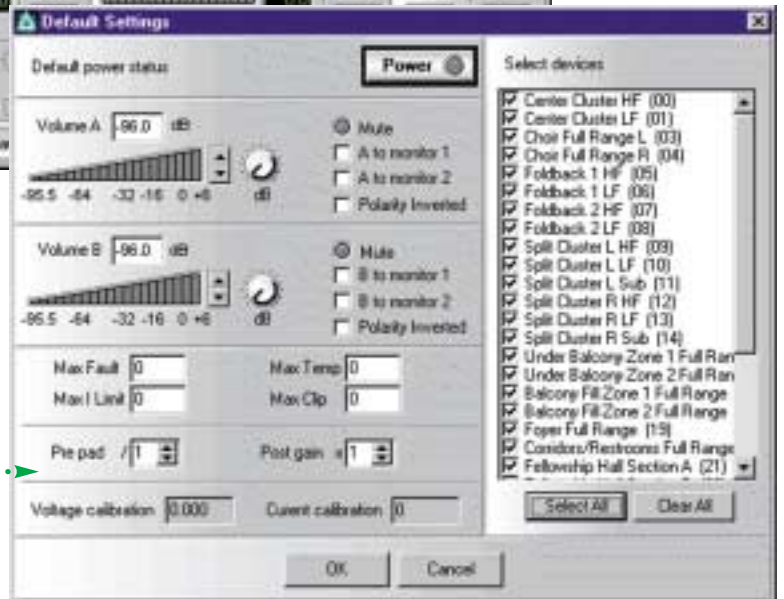
Monitor the line voltage and current as well as heat sink temperature for every amplifier.



Log every amplifier event to a file for easy troubleshooting and system history.

Two channels of audio monitoring allow you to listen to any amplifier on the network.

Intuitive interface provides quick and easy default settings for all, or any combination of amplifiers.



The X-Frame™ Primer

Welcome to the debut of "The X-Frame Primer". We designed this feature for our many loyal clients who aren't regular users of MediaMatrix. Using the X-Frame Primer will enable you to work into digital audio slowly, with fundamentals and real world examples of how the X-Frame88 fits into what you do, day in and day out. We sincerely want you to be a better contractor, and to enable you to be more valuable to your clients, your staff and the consultants who's projects you bid. Have fun!

The prerequisites for working in digital audio are not all that different from working with analog products. In fact, if you look at the big picture, it is actually easier. Audio is a relatively simple thing....you have inputs, you have outputs and then a bunch of stuff happens in between. X-Frame makes this easy, flexible and cost effective.

This month, we will examine the basic architecture of the X-Frame88 and how you get signal in and out of the unit. Also, we will take a inside look at the internal digital "engine" that makes the thing tick, and how you can configure this engine to be what you want it to be.

The X-Frame88 is a DSP based audio product. Like other digital audio products in the marketplace, the X-Frame88 has 3 basic components. It is very important that you understand what these are, and how they interrelate.



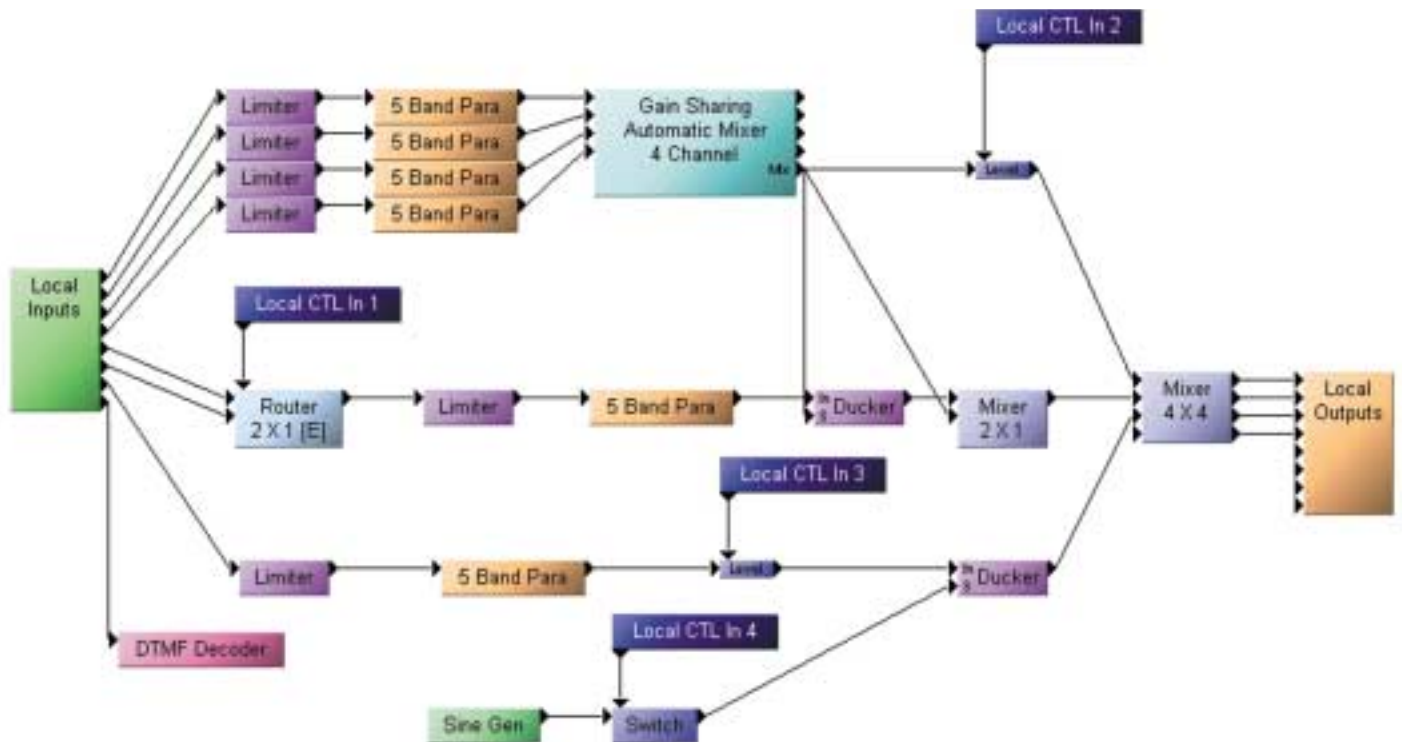
1. A/D

In the X-Frame88, the signal "inside" the unit is digital. But "outside", in the real world, the signal is analog. To get the analog signal into the X-Frame88's internal DSP processing engine, it must first be changed into a digital signal. This process is called "conversion" and is a critical component in any digital system. In the X-Frame88, the converters are high quality, studio grade 24-bit products. This insures that the original analog signal, with all of it's detail, gets into the X-Frame88 without any loss or coloration.

2. DSP

Once the signal gets "into" the digital audio engine, it can be processed, routed, mixed, equalized, compressed, expanded, switched, etc. Just about anything you can do to an analog audio signal can be done in the digital domain. Deep inside the core of the X-Frame88 is the "engine" or DPU (digital processing unit). This is made up of several chips, called DSP (digital signal processor) chips. This DPU includes many other hardware and software sub-components, including the compiler, which takes the raw data for which the audio functions represent, and turn it into code that emulate real audio functions. Several different audio functions can reside

on one or multiple DSP chips, depending on the efficiency of the compiler, and the raw code that represents the audio functionality. How is this done? Well, the X-Frame88, like all MediaMatrix products, is completely configurable. This is part of what makes MediaMatrix so cool. All of this DSP does nothing until someone tells it what to do. The DSP needs a “configuration”, a collection of computer code that creates whatever signal flow you want. This is accomplished via the X-Frame88 software. The software provides many tools, but essentially, it provides the designer a method to “tell” the DSP what it is going to be. The software provides a simple, easy to use user interface (GUI) that includes representations of audio devices. If you have ever drawn a single-line diagram, then you can design in X-Frame. You simply select audio devices from a menu, place them on the screen and “wire” them together! The figure below is an example of a small sound system with 4



microphones, 2 music sources and a telephone paging source. You can see how many different audio devices are included in this configuration and how many wiring paths there are at a glance. This simple configuration represents a system that would include about 20 different audio components. At an average of 2 rack spaces each, this system could eat up a full size equipment rack easily. With X-Frame, it fits into a single rack space!

3. D/A

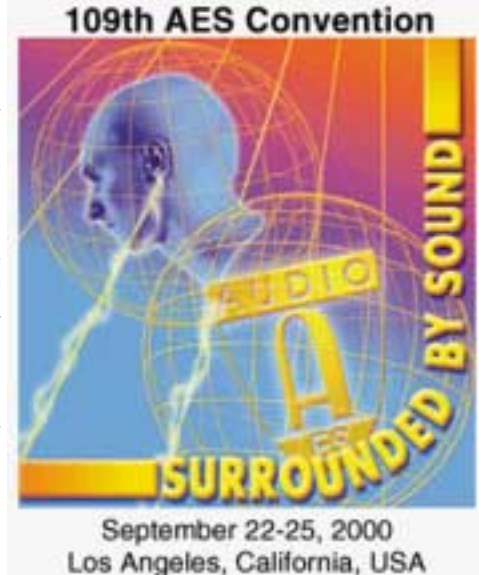
Like number 1 earlier, this is a conversion stage. Instead of taking raw analog audio and converting it to digital data, this stage does the opposite. It takes raw data that is processed from the DSP engine and converts it back to analog audio so we can hear it again. Remember, there is no such thing as a digital loudspeaker, or digital "ears". We are human beings, and live in an analog world, so everything must eventually be converted back to analog.

As we progress, you will see that the sky is pretty much the limit. If you manage your resources correctly and plan out your system design, you can create just about anything. How many times have you short-changed a system design because of budget, or rack space constraints? With MediaMatrix, you don't have to. Go ahead and add that extra EQ. Give the foyer speakers some delay to make them image correctly when the sanctuary door is open. Put a compressor on the piano mic, make the record mix stereo.....you have the tools at your disposal right on your desktop. Why not start designing your next system in X-Frame today?! Go get your free copy of the X-Frame software and design away..... You can find it at <http://aa.peavey.com>.

AES SHOW RETURNS TO L.A.

September 22-25 marks the dates of the annual Audio Engineering Society (AES) Convention. This year's convention will be held in Los Angeles at the Convention Center in downtown LA. The AES show has a unique personality among industry conventions. Primarily a showcase for technical papers, the convention usually features the industry's brightest minds and most innovative research. The exhibition floor has changed quite a bit over the years, and lately, at least to this writer, it seems to be returning to its original roots, primarily professional recording technology. Since this show is somewhat focused on recording and production technology,

we have elected not to have a booth this year. This is the first year in many that we will not have a booth at AES. However, our sister company, Crest Audio will be there, and several AA products will be included in their booth. One of the highlights will be the integration of the highly acclaimed Crest NexSys amplifier control and monitoring system with MediaMatrix. If you are a regular user of Crest amplifiers, you definitely need to see how these two powerful products integrate. Peavey Architectural Acoustics National Sales Manager, Ken Valentine will be there, so please stop by and say hello. The Crest Audio booth number is 941.



NEW MEDIAMATRIX SOFTWARE NOW AVAILABLE

As with all software products, they keep getting better. More functionality, more features, more powerful tools and in the case of MediaMatrix, more cool audio toys. The downside is you have to continually upgrade your software, and then make sure that other components in the system are compatible with the new software. I guess it's the price we pay for always being on the cutting.....or bleeding, edge! Now available is the very latest MediaMatrix software, Version 3.1.1. Among the many new features of this release is support for the new CAB16i, CAB16o, and the CAB16d CobraNet audio bridges. The CAB 16 Series is a new addition to the line that will be shipping soon. There are several new devices and tools including the

gain sharing AutoMixers, ramping routers, DTMF decoders, and control delay. A 'bit transparency' option has been added. When enabled, this disables the input highpass filters as well as the 2 bit shift on the inputs and outputs. And...the 10 machine RAMM autoconnect limit has been removed. There is now no limit to the number of autoconnects for a RAMM client. All of these enhancements make MediaMatrix even more powerful. To make sure you are using the latest and greatest, go to our website and download your free copy. You can find this version, as well as other software at <http://aa.peavey.com>.

OBSOLETE ITEMS UPDATE

Every month we publish this list of obsolete items for sale. Many of these items are sold at reduced prices or are "B" stock items. If you see something here that you may have a use for, please call one of our friendly sales coordinators and get a quote.

PR 1000 IVORY	A/AC8	CA-A800 B
PR 1000 BLACK	IPS 400 EXP.	CA-A800 B EXP.
PR 605 BLACK	IDC 150TII EXP.	CA-M300
PR 605 IVORY	MM930	CA-M300 EXP.
PR 1003T BLACK	CA-A540 EXP.	CA-DP300
IMPULSE 2652 PTD	CA-A800	CA-DP300 EXP.
IMPULSE 1580 NAT.	CA-A800 EXP.	CA-EX100
UMA 75 EXP.	CA-M400	CA-EX100 EXP.
CEQ 280R w/o	CA-M400 EXP.	
AUX-R	CA-A540 B	
TPM-M	CA-A540 B EXP.	

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