



AUDIO INTERACTIVE

NEWS FOR THE COMMERCIAL AUDIO INDUSTRY

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PEAVEY LEADERSHIP TRAVELS TO CHINA

XIAN, CHINA - With more recent installations of MediaMatrix than ever, longtime Peavey distributor Project King continues its successful market development throughout China. Project King, based in Hong Kong, is led by David Law and Tammi Tang. Mr. Law and his staff have been very successful in marketing integrated systems with Peavey products throughout China. With their efforts, MediaMatrix has become a standard in digital audio processing and Peavey is ubiquitous in audio racks everywhere. With impressive project credentials, Project King has been instrumental in several high profile installations. The People's Hall in Beijing, The Shanghai Huangpu River Pedestrian Walk attraction and the all-Peavey Nanjing Culture and Arts Center are just a few of the many projects where Peavey is the audio product of choice.

As a part of our continuing development efforts in the Chinese market, George Douglas, AA General Manager and Larry Linkul from our MI International Sales Division recently traveled to China for a series of meetings with Project King and their newest dealer/contractor, Shannxi Solo Culture and Technology Co. LTD.

Located in Xian, Shannxi Solo Culture is a valuable addition to the Peavey team. Xian is an emerging market and is slowing becoming the new "western frontier" of the world's most populous country. In addition, Xian is home to the Eighth Wonder of the World, The Terracotta Warriors. Mr.

Douglas and Mr. Linkul were graciously hosted by Solo Culture's Mr. Qiang Yi, Chairman, and his staff. Mr. Qiang noted, "I had been the distributor for another well known manufacturer from the U.S. for many years now, but I have seen their business philosophy change dramatically in the past few years. During this time, I have also seen Peavey become very strong in the market and made the decision to work with a company that shares my views. Patience and planning are an integral part of sales within China". We



share Mr. Qiang's views, and are very excited to be working with Shannxi Solo Culture.

ty visits and the grand opening of the Xian Cultural Trade Center. Also, China's newest Five-Star hotel is located next to the Center and is equipped exclusively with Peavey equipment, prominently displayed during each of the hosted events.

The host party also spent time visiting several additional sites where Peavey Architectural Acoustics and MediaMatrix products will soon be installed as well existing system installations. The number of projects currently under development in this great country include more attraction-based parks, convention centers, opera houses, corporate facilities, board rooms and even an airport or two!

The extent of the projects now underway is a credit to all of our Chinese partners. Thanks to David Law and Tammi Tang of Project King and Mr. Qiang Yi of Shannxi Solo Culture and Technology Co. LTD for their world class work in the Chinese audio market. All of us here at the factory would like to say a heartfelt thank you for all of your hard work. We look forward to a continued, long term relationship.

During the visit, and through the arrangements of Mr. Qiang, the Peavey staffers took a whirlwind tour of many new installations in the Xian area. Peavey sound systems were abundant during the many government-hosted banquets, facili-



AUTOMIX 2 OFFERS POWERFUL MIXING FUNCTIONALITY

Long a staple of commercial sound systems, Automatic microphone mixers continue their dominance in corporate work throughout the industry. Used primarily in speech systems, automatic mixers have their modern roots with Dan Dugan's patented NOM algorithms in the seventies, eventually becoming signature products of Altec Lansing thereafter. Since then, several different types of designs have become popular and now exist side by side offering the designer more choices for client solutions. Originally debuting in 1994, Peavey's Automix was a direct descendant of Dugan's design, offering clean NOM=1 functionality and solid sonic performance. Already a popular seller, the Automix was redesigned in 1998 and dubbed the Automix 2. The Automix 2 features all of the functionality of the original unit, plus new features and a cleaner front end.

The Automix 2 is a NOM=1 style automatic mixer. These means that the output of the main summing bus is constant, regardless of the number of open microphones. The front panel of the Automix 2 provides two levels of control. There is a user section, with front panel knobs, and a separate control section located under the plexiglass cover.

Each input includes multiple features for independent control of microphone signals including.....

- Switchable low cut filter
- Switchable phantom power
- Switchable manual or automatic operation
- Switchable mute bus
- Transformer balanced mic. and line inputs
- External muting capability
- Activity logic output
- Aux bus with individual send control

In addition, channels 1 and 2 include additional features including adjustable priority and a pre-fade loop for connecting external signal processing equipment.

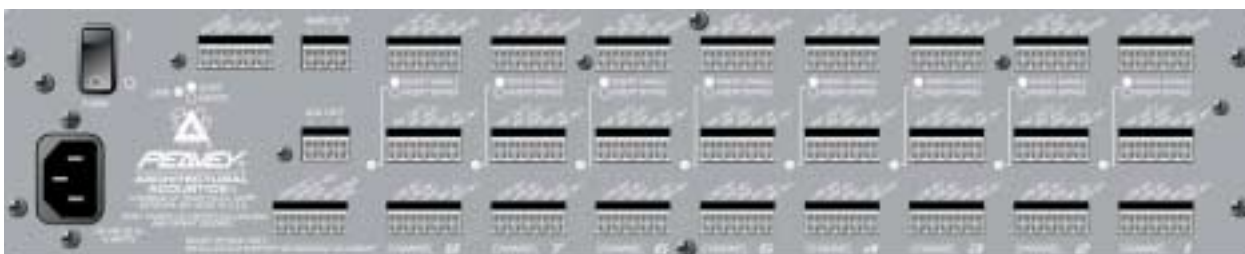
These powerful features enable the Automix 2 to be used simultaneously with different types of microphones and maintain constant gain performance. The microphone preamplifiers have been improved and now feature a new discreet circuit that offers console-like performance. The master section is also feature loaded. A downward expander and three sweepable notch filters offer the designer flexibility and multiple avenues of control over the master output. In addition, a separate aux output provides an easy way to get a record mix that is independent of the main output.

One of the most powerful features of the Automix 2 is its ability to link multiple units. The link bus includes separate link terminals for the audio and control buses. This provides the ability to link the NOM bus across multiple Automix 2's, thereby creating larger automatic mixers with a single NOM bus. The link bus is a common interface among Peavey AA products which means that the Automix 2 can be linked with other products for even greater flexibility. Currently, besides the Automix 2, the link bus feature is available on the SMR 821 program/microphone mixer and the Automix 4 automatic mixer. Linking the Automix 2 with these products allows the designer a simple method of combining inputs in larger systems without the need for additional summing amplifiers or sticky mixers to combine parallel mixing functions.

As you can see, the Automix 2 is a powerful tool for many different types of sound system design. Judicial facilities, governmental hearing rooms, auditoriums, churches corporate boardrooms...even live applications that require simple, hands-off microphone mixing can benefit from using the Automix 2. Superior audio performance, flexible control functionality and powerful linking tools make the Automix 2 a perfect choice for these and many additional applications. Next time you need an automatic mixer, take a good look at the Automix 2, or any of its sister products. Call your local sales representative or the factory for more information, pricing and availability on the Automix 2. We are sure that you will not be disappointed.



The Automix 2 Front Panel. The white control knobs are located behind a tamper proof plexiglass cover, not shown.



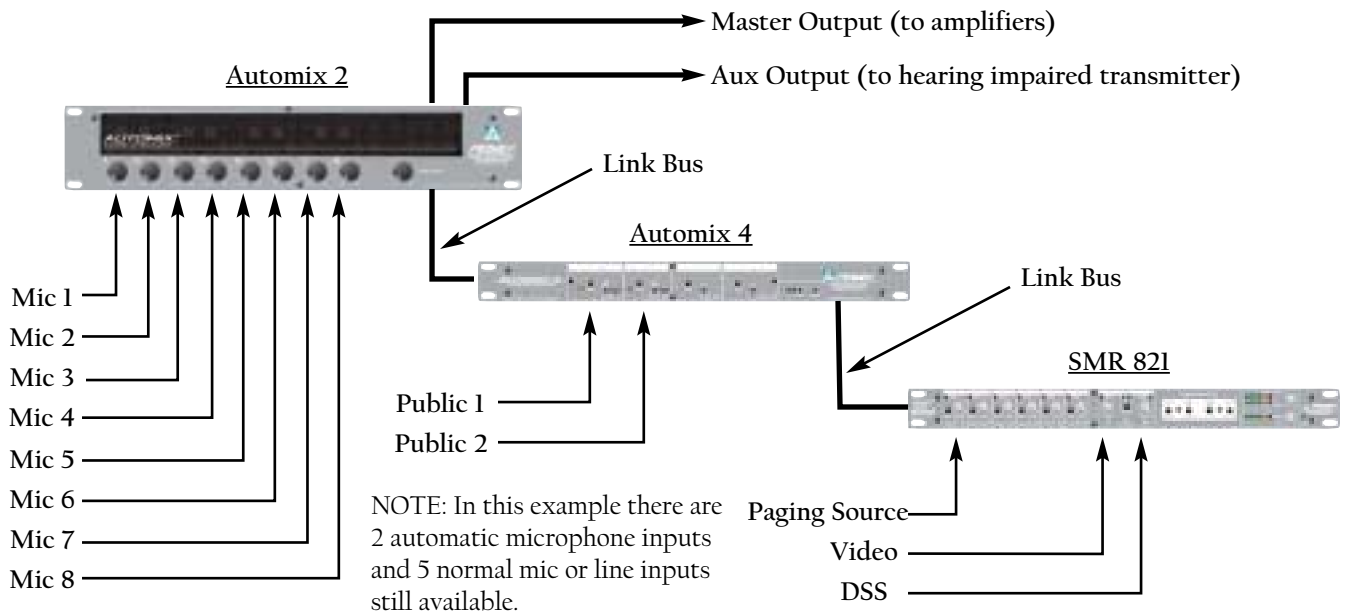
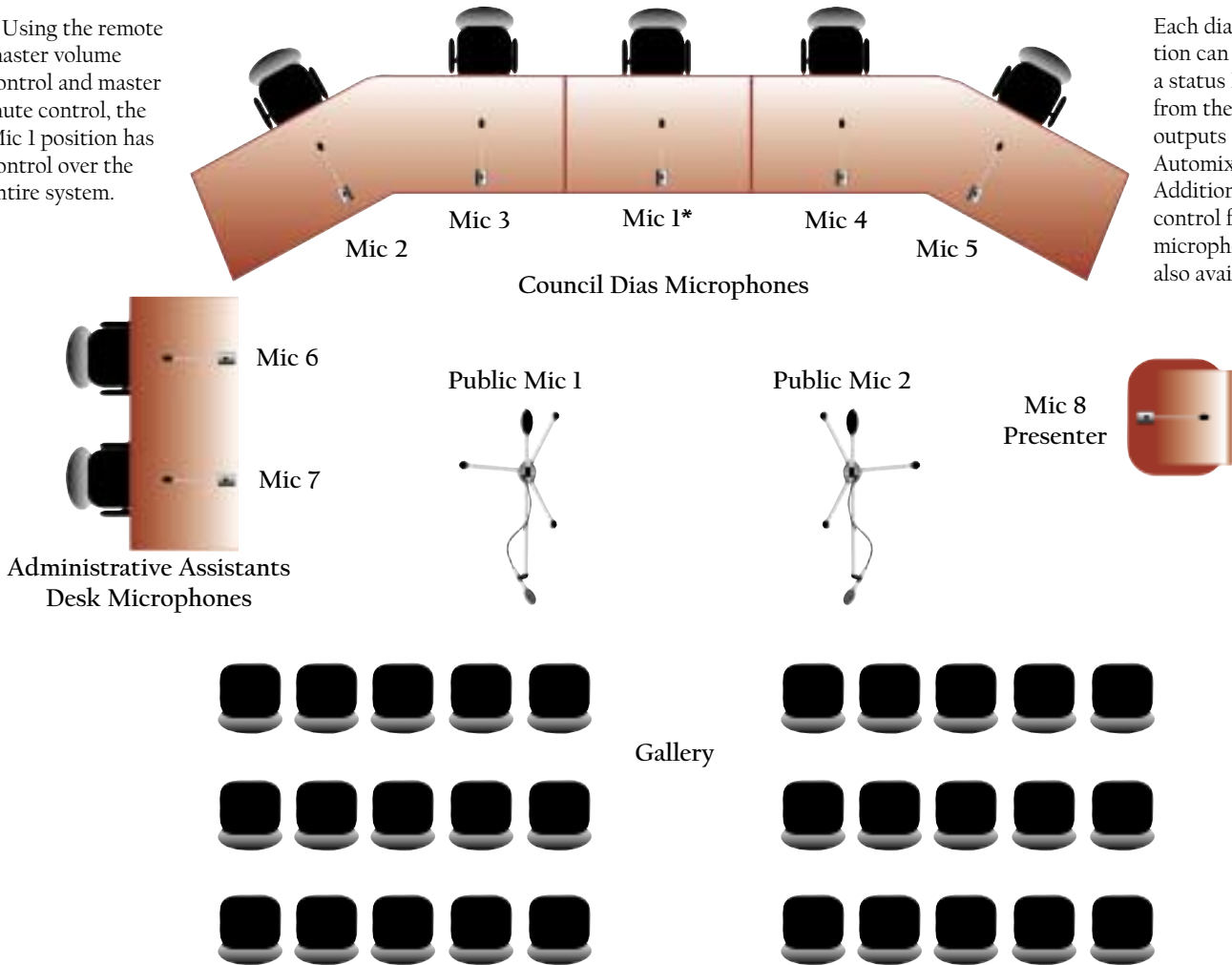
The Automix 2's rear panel features removable euro connectors for easy installation and service in fixed installations.

In the application example below, we have a hearing room facility that requires 8 microphones for the council and staff and two microphones for public address. In addition, there are stereo line inputs for video playback, and a DSS satellite system. Also, a hearing impaired transmitter must get the master output signal, but with an independent, adjustable level control. Using the

Automix 2 with the Automix 4 and the SMR-821 together gives us a very powerful cost-effective solution. The master outputs are taken from the Automix 2, since it is the master device on the link bus. The inputs from the Automix 4 and the SMR-821 are also present on this output. The NOM bus is preserved, but excludes the line level input and the master page source.

* Using the remote master volume control and master mute control, the Mic 1 position has control over the entire system.

Each dias position can include a status LED from the logic outputs of the Automix 2. Additional mute control for each microphone is also available.



CONTRACTORS KNOW HOW TO HAVE FUN!

As we continue into the last quarter of 2000, the MediaMatrix seminar program continues to attract record crowds. Several of these classes during 2000 have been over-booked, and we have been forced to turn many eager audio designers away. For 2001, we will be adding several classes and expanding the curriculum to include more advanced topics as a part of the regular class. In addition, we will continue the Advanced Class for those of you are ready to move on to the next level. The most recent class, held at the Peavey International Headquarters in Meridian, Mississippi during the week of October 16th, was again, a huge success. An overflow crowd of eager systems designers and end users were on hand to learn more about MediaMatrix technology and products. The weather is great in Southeast Mississippi in October and the group had a great time during their week. After long days of brain warp, the class was treated to several hosted evenings of fun, camaraderie and fellowship with their audio brethren. Recently, we have added a

“Casino Night” to the event to give the attendees a little break from the routine in Meridian. Let’s face it...although Meridian is a great place to live, work and raise a family, it doesn’t exactly set the entertainment world on fire. To provide a little excitement, we transported the class via the luxurious Peavey bus to the Pearl River based Choctaw Indian Reservation where there is a full-blown Las Vegas style casino. Only a 45 minute drive from the classroom, the night was a success and several attendees even profited, taking home significant winnings, courtesy of the Silver Star Resort and Casino. As with most of the MediaMatrix classes, a small but mighty group of musicians emerged and found break time a little more fun by taking turns in the Plant 17 “Fish Bowl” where several samples of Peavey MI products are displayed. These snapshots, taken by fellow attendee Shawn Siqueira is proof positive that audio designers and sound contractors know a little bit more about the music side of the business than is usually acknowledged....!



MediaMatrix October 2000 Class in front of Peavey International Headquarters, Meridian, Mississippi. Front Row, L-R: Jeff Lange, R. Lee Townsend, Greg Harvey, Scott Leonard, Bob Bonfrancesco, Roger Ihde, Lloyd Kozel, Richard Smith, Craig Compton, “Audio Interactive” Editor & AA Operations Manager Will Roland. Back Row L-R: Fred Schafer, Tom Francis, Paul Vella, Dennis Sanford, Shawn Siqueira, James Stewart, AA National Sales Manager Ken Valentine, Steve Phillips, Bill Taylor, Michael Kalmanson, Todd Rold, William MacLeod, Ellery Penas, Howard Schlieper, Bonnie Hong, Bill Fairchild.

TECHNICAL SERVICES GROUP'S NEWEST MEMBER

As we do every month, we are proud to feature one of our valuable team members. This month we feature one of the unsung hero's of the AA Team, Darry Clark. Recently promoted from the AA Sales Department, Darry is now in the Technical Services Group where he is responsible for telephone support, troubleshooting and repair of AA and MediaMatrix products. Darry has a strong background in technical work, having spent 6 years in the MI Service Group before joining the AA Team. Among his many skills are component level circuit repair and system troubleshooting. Currently in training for advanced MediaMatrix technology, Darry will soon be a welcome addition to the growing support base for MediaMatrix systems. When Darry isn't on the phone helping you get your systems installed, he enjoys martial arts, roller skating and frequent trips to Jackson where he is a regular at one of the few sushi restaurants in Mississippi. Darry is also a reservist in the US Navy Reserves and

has over 15 years of active and inactive duty under his belt. Next time you need assistance or tech support for AA or MediaMatrix products, ask for Darry. You won't find many in this industry who can give you the kind of accurate and friendly advice that Darry gives every-day.



SMR 6 MIXER DISCONTINUED IN FAVOR OF SMR 821

As you probably know, we released the new SMR 821 analog mixer earlier this year to rave reviews. This unit is feature packed and very cost effective for just about any audio application. (See the May issue for details). What you may not know is that the SMR 821 replaces the SMR 6 mixer which had been in the product line for many years before. We will continue to ship the SMR 6 until current inventory is depleted, but no additional units will

be manufactured. As of this writing, quantities of SMR 6 mixers were extremely low, and will be depleted very soon. If you have projects specified with the SMR 6, you should note the change and replace it with the SMR 821. If you have purchase orders already in house for SMR 6 mixers, or are concerned about older specifications in which the SMR 6 is specified, please call Ken Valentine, National Sales Manager for details.

	SMR 6	SMR 821
Inputs	6 mic, 2 mono line	6 mic, 8 line mono, 2 line stereo
Outputs	Mono main & aux	Stereo main, mono aux
EQ	3 Band	4 band with security cover
External Control	None	Master, stereo select, mute
Stereo Inputs	None	2 switchable or simultaneous
Front Panel Metering	5 Segment single channel	3-5-segment LED (stereo and aux)
Phantom Power	24V	48V



SMR 821 Stereo Mic/Line Mixer



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!

Last month we looked at signal flow, and the various stages that an audio signal takes from the source, through the XFrame88 and out. We looked at the conversion stages, the processing stage and how it all works together inside, and outside the digital domain. Understanding signal flow is a fundamental requirement to becoming a good systems designer. You must know where signals go, how they are split and distributed both in the analog and digital domain. For sure, this is a major pre-requisite to good design. If you aren't sure about your ability with signal flow, you may want to review last month's Primer, as we move deeper into the XFrame88.

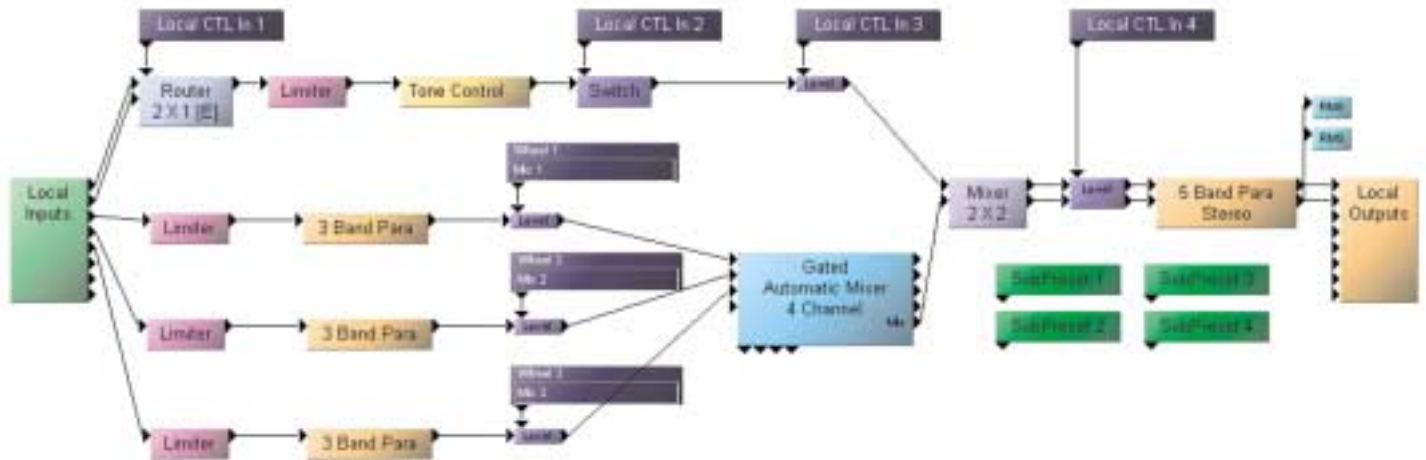
This month we continue our look at signal flow, but unlike last month, where we traced a signal from analog to analog, we will look only "inside" the XFrame88, at the digital side of the configuration.

First, let's review the basics....Once the signal gets into the XFrame88 and past it's analog to digital converters (A/D), the signal becomes digital and enters the XFrame's digital processing unit or "DPU". This DPU, also referred to as the DSP, or the "sound engine", is common to all MediaMatrix products. This is the area of the XFrame88 that holds all of the power of configuration, control and external interface. Unlike other digital processing products, the XFrame88 has no predetermined configuration setups. It is completely open, and un-configured, allowing you, the designer to determine the actual audio path and processing components that will be used with your system. In fact, if you don't configure it, you won't be able to pass audio at all, effectively making the XFrame88 just a box, taking up rack space. That's right, out of the box, the XFrame88 will do nothing....until YOU configure it. Why? Simple...the power of MediaMatrix is CONFIGURATION...no assumptions are made as to the signal flow requirements of your system. There are no fixed signal paths at all. It is completely up to you. This....is the power of MediaMatrix.

OK...so, what do I do? Well, it isn't much different from what you would normally do when designing a sound system. Draw it out....! If you are like me, your system design, whether it is a proposal or a set of construction drawings starts with a single line diagram. In my former life as a systems designer, my "single line" was the basis for the entire project. The budget, the parts list, the installation and the functionality that the client was expecting to solve their audio problems. The same scenario exists with MediaMatrix, except that when you draw it up, you actually create the audio signal flow, eliminating countless boxes that take up valuable rack space in the process! So, let's look at how this is done. First, remember that we are working in the digital domain. We are between the converters at the "inside" section of the signal flow where nothing happens until the configuration is created. Within the XFrame's software lives the heart of MediaMatrix, the Device Menu. The Device Menu is where it all happens. This is where you pick and choose your audio devices, controls and hardware interfaces and draw your "Single Line".....

The most basic element is to understand the fundamental difference between the different types of devices available from the Device Menu. Breaking this down further, we will look at two primary types of devices....**Hardware Interface Devices** and **Audio Processing Devices**. Although both types of these devices live in the Device Menu, they address completely separate functions while still working together to create an integrated configuration. **Hardware Interface Devices** represent actual hardware components that are either a part of the XFrame88 or the optional MM-8802, or components that connect to them externally.

Configuring **Hardware Interface Devices** is critical to the proper operation of your system. Among the many hardware devices included in the XFrame88's Device Menu are input and output devices, serial control nodes, BoB control nodes, front panel knobs, preset buttons, etc. Audio flowing within the XFrame88 is processed by **Audio Processing Devices**, also from the Device Menu. These include mixers, equalizers, compressors, etc. Regular audio stuff that you use everyday. Although both types of devices exist simultaneously within the XFrame88 and it's software, they do have different functions. Keep this in mind as you progress.



In this example, we have a stereo system with 4 basic inputs for a small hotel presentation room. There are two music sources coming in on Local Inputs 1 and 2, and three microphones on Local Inputs 3, 4 and 5. The system requires a flush mounted single gang wall control panel that includes Music Select, Music On/Off, Music Volume and Master Volume functions. An example of this panel is shown here. In addition, each microphone input also needs remote control, but these mic controls need to be at the equipment rack location at the back of house (BOH), and not in the presentation room. This way, the user can have simple control of the system, but not enough control as to prevent proper performance. Individual microphone levels should not be accessible by the user for this application. Ideally, these levels are set for optimum nominal performance, requiring only occasional minor adjustments that the hotel staff can manage. Since the system uses an automatic mixer, there shouldn't be a need for constant adjustment, and the system can operate as it is supposed to....hands off! In the configuration exam-

ple, you can see which devices are processing audio, and which are interfacing hardware. The wall controls are using **Local CTL** devices 1 (Music Select), 2 (Music On/Off), 3 (Music Volume) and 4 (Master Volume). The XFrame88's front panel wheel is being used to create three virtual "knobs" at the equipment rack. These are represented by **Wheel 1** (Mic Input 1), **Wheel 2** (Mic Input 2) and **Wheel 3** (Mic Input 3). Additional hardware interface is provided by two RMS meters on the master outputs which will display on the XFrame88's front panel meters. The rest is audio processing (Limiters, EQs, Automatic Mixer, etc.) and the I/O (Local Inputs, Local Outputs). By now you should have a good grasp on the difference between **Hardware Interface Devices** and **Audio Processing Devices**. The integration of these devices in real world systems is what makes the XFrame88 so powerful.

LAST TRADE SHOW OF 2000 A SUCCESS

Although trade shows can be grueling, and often follow each other back to back, it is vital to stay in touch with the industry by attending these important events. The last show of 2000 at Peavey is IAAPA, the International Association of Amusement Parks and Attractions. This year the show was again held in Atlanta at the Georgia World Congress Center. Although we didn't have a booth this year, IAAPA is still an important event. Many Peavey AA products are used in the theme park world, and IAAPA is a vital event in this dynamic industry. This year we were again proud to exhibit selected AA and MediaMatrix products in the Alcorn McBride booth. Alcorn McBride is a manufacturer of high quality show control, video and audio products designed for high end integrated systems. We enjoy a good relationship with Alcorn McBride, and are big fans of their excellent products. As a part of Alcorn's video/show control theatre exhibit, a MediaMatrix system was used for processing multi-channel audio for video. Also used were several Impulse 652S loudspeakers and IPS 150 power amplifiers. If you are involved with the entertainment industry, or just need a great product line for video or audio playback or dynamic control, check out Alcorn McBride. Thanks to Steve Alcorn and all the great staff at Alcorn McBride for partnering with us again at IAAPA 2000.

FROM THE EDITOR.... SORRY WE'RE LATE...

As you may have noticed, this issue of Audio Interactive is late this month. We apologize for the delay. We strive to get the newsletter out every month by the 10th or the 15th of the month, at the latest. We are working hard to make Audio Interactive a quality publication, and part of that quality is consistent, on-time delivery. We will hit the ground running early in January and will be looking forward to a great year in 2001. Thank you for your patience. WR.

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/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	<i>Also, there are many first generation IA</i>
CEQ 280R w/o	CA-M400 EXP.	<i>Series power amplifiers available. CALL!</i>
AUX-R	CA-A540 B	
TPM-M	CA-A540 B EXP.	