Q&A with Joe Martinez Vice President, OWI –INC

What is NFPA72 and how do the regulations affect classroom and meeting room audio systems?

NFPA72 is the National Fire Alarm and Signaling Code and provides the latest safety provisions and requirements for fire detection, signaling and emergency communications. The effect on classroom audio comes from two areas. One is the section 24.4.7 that addresses which systems have priority. It is pretty simple as audio is down the list regarding priority. Emergency mass notifications have priority over all systems including fire alarm. The audio system either needs to "duck" or mute when the emergency page announces or shut off completely. The second part of the changes is in intelligibility. Section 18.1-18.4.5 talks about how the announcement needs to be 15 dB louder than the noise level of the room. A classroom full of kids can get up to 70 dB pretty easily so your announcement now needs to be at 85dB. That's just to climb above normal noise. When you add in 40 watts of audio video (like with the OWI system and many others) it is easy to see how many legacy systems with a 1-watt speaker get overpowered pretty quickly and not be heard or understood.



AMP-HD2SIC6

We talked to some inspectors who said those systems work fine but they test them on Saturdays when the kids aren't there in a quiet room. That isn't realistic.

How does OWI's amplified speaker integrate with life safety?

It can be done in two ways. We employ in our AMP-HD series what is known as an audio ducking circuit or page override. The program material from a projector or computer or similar device is momentarily muted and the page coming from the paging system sounds over that signal. We have experience at integrating with various systems and battle tested field experience in the various nuances that can cause problems. We've been doing this for a while.

Because not all paging systems have all the life safety signals routed through them and also because not all integrators and facilities take the step to integrate with the paging system we developed what is known as an electronic shunt that turns the amplifier off when fed a contact closure signal. Some third party manufacturers insist that theirs is the only system to sound. Some systems and facilities require that an all off is mandatory for emergency announcements to sound through an emergency system on a back-up. These days shutting off a rack or equipment, and especially computer and servers. can have problematic consequences so our system makes it easy to just shut off the loudspeaker via switch or a key.

How do schools integrate existing systems past present and future and remain cost effective?

The difficulty lies in keeping up with technology and regulations and cash



Joe Martinez, Vice President, OWI-INC

outlays for a myriad of considerations facing schools today. How do you keep up? We don't have the answer for all of it but for audio reinforcement we have developed a product in our AMP-HD2SIC6 series that makes it quick and easy to install and that works with standard protocols of line level and 70/25-volt systems making it able to work systems from the past, present and future.

OWI Inc has been making amplified speakers for over a decade and have developed the current products from the evolution of in the field feedback and issues from real world installations. Working closely with a variety of integrators and consultants OWI applied the feedback received to develop a product that allows for flexibility to work with a myriad of third party equipment both from the past, present and future and provides a quick, easy and cost effective way to meet today's life safety regulations as they apply to audio in the classroom and meeting rooms.

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OWI AMP-HD amplified in ceiling speaker