Voice for safety, security and lockdown

Ian Bridgewater, Managing Director at TOA Corporation explores the increased use of voice announcements in schools and why lockdown features are becoming essential



Until recently we would not have used the terminology 'lockdown' but with increasing reports of tragic events it is now extremely important that schools have a system that can be activated to keep staff and pupils safe in the event of an incident and not to necessarily automatically evacuate.

Whilst the current threat of intruders in the UK is low that does not mean that no risk exists and therefore all educational institutes should have a lockdown assessment, policies and procedures. It is important to note that, unlike a fire drill, the aim of lockdown is to invacuate to safe internal areas rather than evacuate the premises to a designated outside area as you would in a fire.

So, what does lockdown mean? It is the conscious decision to identify and implement safe refuge places within the building that can provide secure areas for pupils and staff to wait, with adequate facilities, in the event of an incident. The aim is to provide maximum safety and well-being whilst waiting for an emergency team to arrive to deal with the issues and get them contained and under control. These areas must be able to communicate with third parties such as police and therefore a traditional bell sounder system would not be able to facilitate this.

Invacuation and evacuation

Moving from a bell-based system to a voice-activated solution is an investment, but it offers far greater flexibility and control. A traditional bell automatically signals evacuation, leaving no way to communicate if a different response is needed. Voice systems support both invacuation and evacuation, can be zoned to deliver tailored instructions to different areas, and allow pre-recorded messages for events and activities.

A voice-enabled approach also enhances the rhythm of the school

> **"Modern voice alarm systems are designed to be robust, flexible to extend and reliable to ensure the investment has a long-term life cycle."**

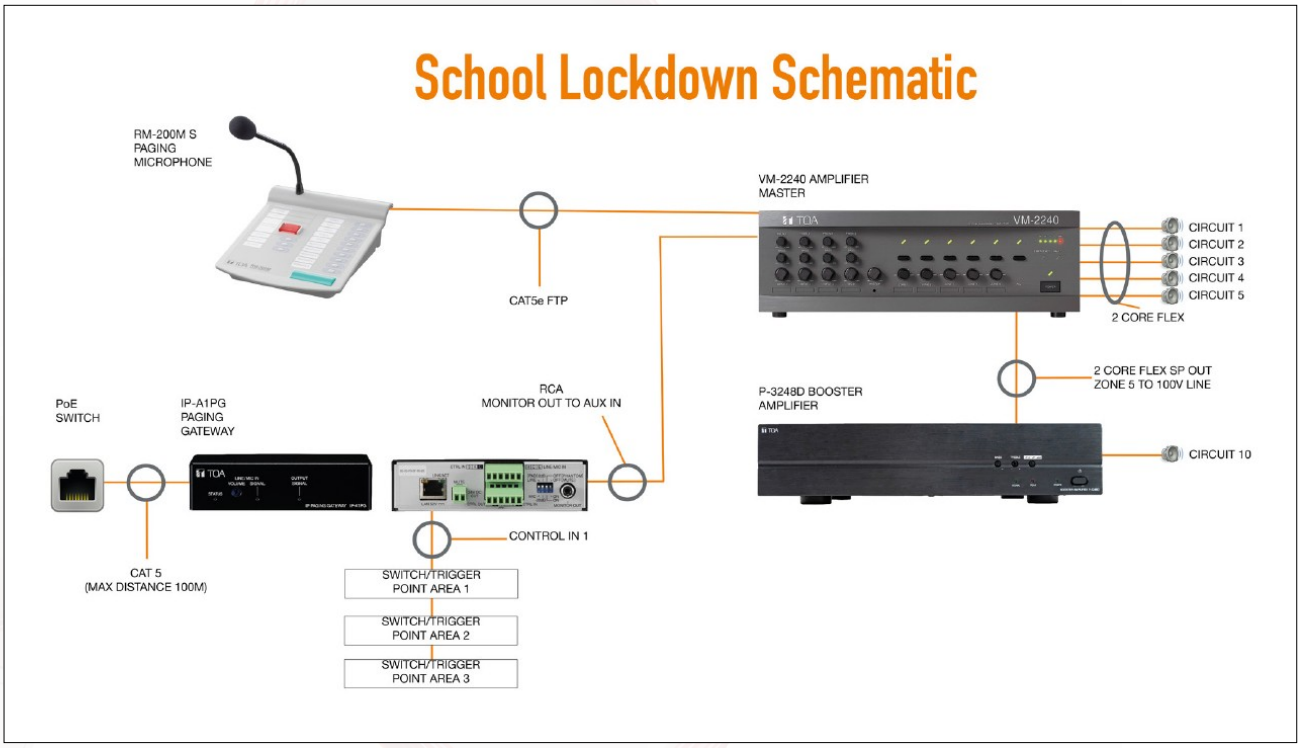


day. Amplifiers and paging microphones - capable of delivering both live and pre-recorded announcements - save valuable time and may even save lives. Custom messages for class changes or behaviour reminders further support smooth operations.

With advances in IP audio, a lockdown announcement may be recorded onto a paging gateway and linked to a switch that is easily activated during an emergency. IP intercom solutions enable both internal and external communication and all of these technologies integrate seamlessly with each other and with CCTV. Pupils and staff are then trained to respond to specific messages delivered by authorised personnel and to return to classrooms only when instructed to do so.

Modern voice alarm systems

So, what should the end-user think about? Modern voice alarm systems are designed to be robust, flexible to extend and reliable to ensure the investment has a long-term life cycle. When designing a system it is extremely important to understand end user needs and whether it needs to comply to any standards and that the investment can comply and expand if required.



System design is always important in sound design. All buildings are different and different textures of fabrication, ceiling heights and room usage can affect acoustics. As a global manufacturer of acoustic systems, we would always recommend getting technical support on large projects to ensure the system is fit for purpose and has the option to extend should the needs change or premises gets expanded. Our technical team are experts at understanding and being able to model acoustics systems to get the best results and we always recommend an individual design for project work. Our team greatly enhance the work that we do and reflects the TOA global declaration of social contribution to ensure our systems are of the highest standards in keeping people safe and informed.



"Whilst the current threat of intruders in the UK is low that does not mean that no risk exists and therefore all educational institutes should have a lockdown assessment."

Voice evacuation systems

It is important to understand the regulations that surround public address and voice evacuation systems. In the UK there are two standards that apply to most public address and voice evacuation systems:

BS EN 50849 requires BS-EN54 certified components that are suitable for use a Sound System for Emergency Purpose (SSEP). A SSEP is a public address audio system that can deliver emergency messages but is not connected to a fire system.

BS-5839-8: 2023 is the standard in the UK that should be adhered to if the system is a public address and voice alarm system that also connects to the fire alarm system. Installations must use independently certified EN-54 products, it is a legal requirement for power supplies, control and indicating equipment and speakers to be EN-54 certificated by a third party approved body.

So, the important question is does lockdown apply to other venues? With the ongoing development of the legislation surrounding Martyn's Law the simple answer is yes. Venues will be expected to have evacuation and lockdown procedures in place and trained staff. However, there are two marked differences between entertainment venues and educational facilities. School lockdown does not, generally, have separately trained staff so the onus is on the teachers to become safety officers and be responsible for their students. To their advantage, however, schools can practise a lockdown scenario and train their students unlike venues who will not have the opportunity to practise with the flow of new audiences. This makes it much more likely that students will remain calm and follow instructions because they have been trained to do so.

In summary our advice would always be to obtain expert advice when planning a life-safety system and to use the technical resources available to get the most comprehensive and safest system for your building. ■