ISCVE

Voice Alarm Systems Guide
For Responsible Premises Management Guide

Institute of Sound, Communications
and Visual Engineers Ltd

iscve.org.uk

A Voice Alarm Guide for Responsible Premises Management

(End Users/Facility Managers/Building Managers / Fire Safety Managers etc.)

Under the right circumstances, Voice Alarm Systems (VAS) in buildings have been proven to be the most effective way to evacuate the premises in the event of an emergency. This is primarily because people respond more promptly to a verbal message, as opposed to a Fire Alarm sounder or bell. This is because a VAS uses the 'spoken' word, giving clear instructions of the action that needs to be taken.

This is particularly important in buildings where a) occupants are only visiting on a temporary basis and may not be familiar with their surroundings (e.g. shopping centres, transport terminals, public buildings and the like) and b) large buildings that operate a phased evacuation strategy. The messages may be pre-recorded (initiated by a monitored link from the Automatic Fire Detection system) or live announcement broadcasts from the emergency microphone at the Fire Control location(s) in the building.

VAS must meet the requirements of the current versions of BS 5839-8, BS EN 54-16, BS EN 54-24, the Consultants system performance specification and local regulatory requirements. BS EN 50849 covers Sound Systems for Emergency purposes (but not linked to a Fire Alarm system). In Sports Stadia BS 7827 and The Green Guide should be consulted in addition to the relevant afore-mentioned standards.

These are critical life safety systems that need to operate after a fire has started and continue working during the emergency evacuation. Therefore, they must be highly secure and robust – utilising fire-rated cabling, secondary power supplies (with integral batteries) and full system monitoring to ensure that any faults are notified promptly, so that repairs can be completed without delay. Emergency evacuation systems must be available at all times.

Public Address (PA) systems, where not relied upon for use in emergencies, do not qualify as VAS systems as they do not meet the above Standards.

Responsible Premises Management, as defined in BS5839-8:2023 Section 6, need to be aware that they have a legal responsibility for ensuring the correct operation, testing and maintenance of these critical life safety systems is carried out – and for maintaining up-to-date records.

Ongoing operational training, testing and maintenance arrangements of the VAS all come under the legal duties of the single nominated member of the Premises Management. This includes documented weekly testing of the VAS by nominated staff in accordance with clause 39.1 in BS 5839-8:2023 and documented 6 and 12 monthly maintenance inspections by a competent organisation with adequate access to spares and a good knowledge of the system, in accordance with clauses 40.1 and 40.2 in BS5839-8:2023. Consideration may also be given to having the VAS system third party verified. Particularly if the system has been inherited or if service and maintenance records are not available.

The ISCVE offers the 'VA for Responsible Premises Management' training course, designed to understand the legal responsibilities of this role. Details can be found in the Training section of the website.
https://iscve.org.uk/training-development/training-events/voice-alarm-skills/#vapremises

The ISCVE also has highly experienced Members capable of carrying out maintenance of VAS systems. Contact info@iscve.org.uk for more information.

With regards to operational training, the ISCVE has an excellent guide to assist in the training of microphone users. Click on the link below to download a copy of this guide.
https://iscve.org.uk/standards/a-guide-for-training-microphone-users-of-sound-systems-and-other-communication-systems/

Finally, the ISCVE has highly experienced Members capable of carrying out third-party verification of VAS systems.
Contact info@iscve.org.uk for more information.