Chosen technical data

1438-CPR-0401

Number of simultaneously processing audio signals	4
Digital messages format (playing and recording)	PCM
Log event buffer	2048
Frequency response (- 3 dB)	20..20 kHz
Signal to noise ratio	> 80 dB
Distortion THD (1 kHz)	< 0,5 %
Interfaces for 3-rd party system integration	2x RS232/RS485
Service and maintenance interfaces	1x USB, 1x Ethernet
Number of loudspeaker lines	128 (64 A/B)
Number of microphone stations	8
Number of binary inputs	64 (WSS) + 18 (KG-ETH)
Number of relay outputs	64 (PPW) + 2 (KG-ETH)
Loudspeaker lines monitoring methodology	Pilot or impedance
Number of sub-systems in network configuration	32
Topology of network	Chain or ring
Amplifiers range	1x 1000 W, 1x 500 W, 1 x250 W, 2x 500 W, 2x 250 W, 4x 250 W, 8x 125 W, 8 x 60 W
Voltage	20..60 V DC
Rack dimensions	600x800 mm, 24 to 50 U

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European Funds Smart Growth
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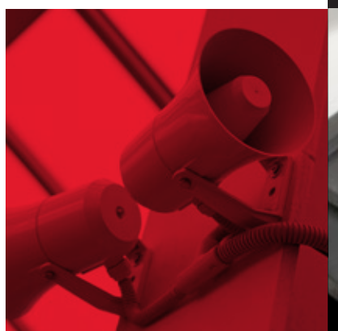
Sounds under control

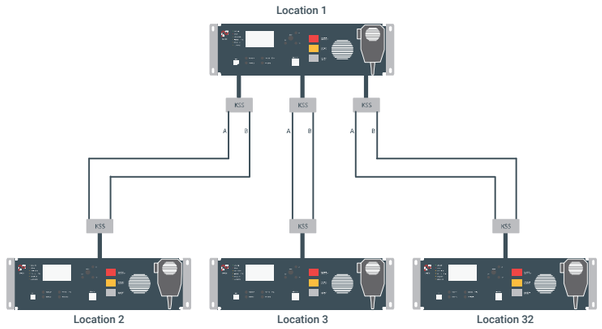
Innovative solution | Made in EU | European Construction

Voice Alarm System

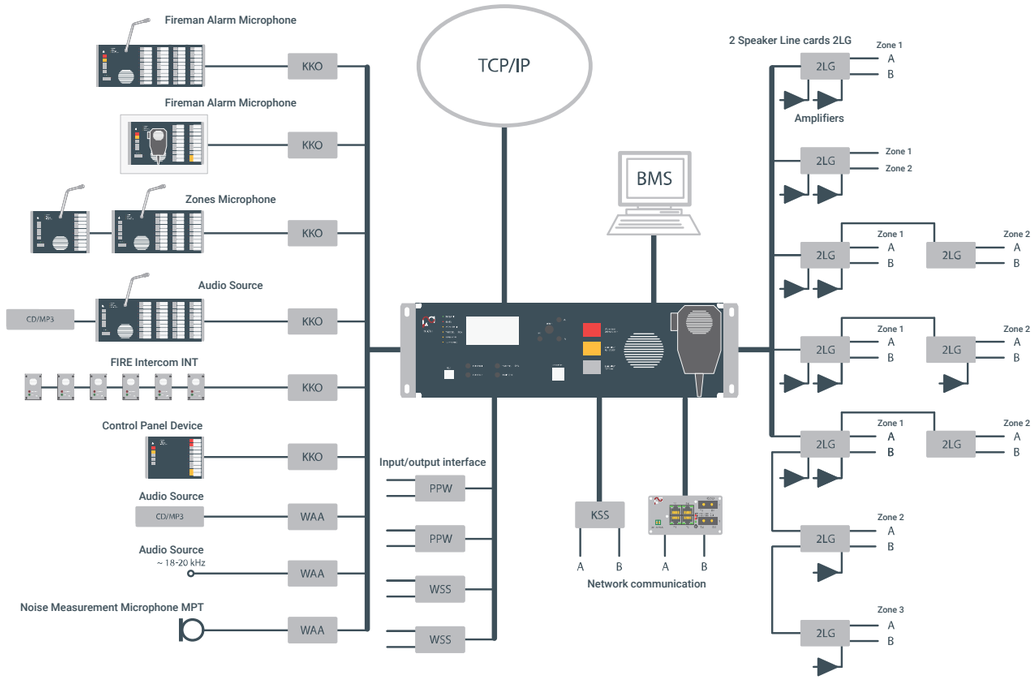
EN 54-16

IVO

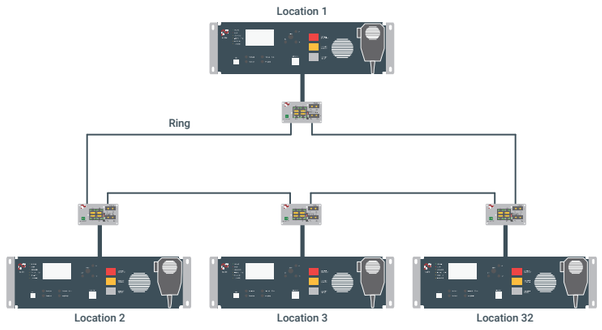




Network Configuration (copper wires)



Basic Configuration



Network Configuration (Fiber Optics)

Sounds under control

Voice Alarm IVO has been designed by engineers and practitioners who very well know what market and Voice Alarm Systems require. Inventors of the system have been actively participating in both development and implementation of numerous VAS installations in various types of buildings.

IVO has been developed with the co-operation of well-known and experienced engineering European companies.

IVO is modular. The main element (KG-ETH main controller) is equipped with a set of mandatory inputs and outputs however expansion of the system is easily achieved by simply adding appropriate modular cards into system cassettes.

The system functionalities may be easily extended without the need of developing new electronics.

System's developers have put special emphasis on the use of components and technologies making IVO energy efficient both during full power operating or standby mode.

The main controller manages the operations of other cards in the system and the flow of sound streams. It contains main processor and bypass controller. It has built-in message and alarm signals modules, however tt also records verbal announcements that have been broadcasted by system operators. Controller supports functions related to integrations via Modbus protocols and/or ASCII support mode. It is equipped with RS232 / RS485 and LAN / WAN ports. The KG-ETH controller supports up to 4 different simultaneous audio streams. On the KG-ETH front panel there is a hand-held microphone, a listening speaker and number of configuration buttons that can be freely programmed.

IVO might be equipped with Microphone Stations/Consoles MA/MAR alarm microphones and/or MI information microphones. The console in the basic version consists of the main part, equipped with a set of obligatory indicators and a set of 5 quick access buttons and 10 programmable buttons. The next models in the series have 20,30,40 and more programmable buttons. Microphone consoles allow advanced control of the control panel functions. MA and MI consoles have a microphone on a flexible headband called "goose neck".

The MAR console is equipped with a hand-held microphone with a "push to talk" button instead of a "goose neck". In addition, MAR microphone can be enclosed in a metal OME housing equipped with a key lock that can be opened with a light fireman's axe.

Fire Intercoms are dedicated for voice communication with other intercoms, KG-ETH main controller and microphone consoles. They are equipped with a maximum of 5 programmable backlit buttons. Communication on the bus takes place in the digital domain. Intercoms are powered directly from the ZDSO48 power plant.

MPT measuring microphones are designed to measure the background sound and automatically adjust the volume of audio signals on loudspeaker lines.

Audio signal transmission between network modules, consoles and control panels is done digitally. A copper fire cable is used for connections between concentrated and network system components. The network of Voice Alarm Systems can also be connected by a fire fiber optics in the ring configuration.

The KSS card is used for communication between IVO central units in the network system. KSS has a dual port for transmission of audio streams and control, KSSO converters are designed to connect the network system control panels using the fire fiber optics. The parameters of KSSO modules enable transparent and delay-free transmission of several high-quality audio streams simultaneously.

Network modules enable connection between IVO network system control panels in chain or ring configuration.

The WSS card is used mainly for connection to the zone outputs of fire detection system devices. Activating the card's binary inputs enables advanced control of the IVO control panel.

The PPW relay output card is used to control external fire devices and building automation. The high overload capacity of the relay outputs enables direct control of high power loads.

2LG cards are intended for loudspeaker lines. One module allows the connection of two loudspeaker lines, operating in A / B configuration or as independent zones 1 and 2. The system enables power supply from one power terminal of one loudspeaker line, two lines of the same zone (in the A / B configuration) or any number of loudspeaker lines. Mixed work is also possible.

2LG cards are also adapted to work with VCT series controllers, used to adjust the volume (attenuation) on IVO speaker lines.

There is a wide range of energy-saving amplifiers. WM amplifiers are powered by 48V DC directly from the ZDSO48 power plant and include a family of 1- to 8-channel devices with 60,125, 250 and 500 W RMS power (per channel).

ZDSO48 is a family of power plants with a rated output voltage of 48V DC and a maximum power of 4kW. The IVO control panel with the ZDSO48 power supply system is placed in a 19" rack 24 to 50 U height.