



## **Inform Selectively, Evacuate Safely**

Complete systems for voice alarm and  
fire detection technology

# New Ways for Safe Evacuation



The application area for voice alarm systems encompasses not only public buildings with a high number of visitors, but all buildings in which persons are not familiar with the building layout or the emergency exits.

Whether in airports, hotels, shopping centers, hospitals or care facilities—the physical structures of buildings in which many people meet are becoming increasingly more complex. Parallel to the dangers and risks involved, awareness of the necessity for an even better way to protect human lives has also increased over the last several years. While the protection of property was usually the main focus of fire protection for insurance reasons in the past, today one finds that in almost all new building regulations, and in particular in specific building codes, there are references to the event-dependent warning of persons in these buildings. The new DIN VDE 0833-4 has made an important contribution to this development. This new standard addresses the coupling

of the voice alarm system with the fire alarm system more clearly than ever before and contains clear guidelines for alarm signaling equipment operated by fire alarm systems. Architects, consultants and installers of voice alarm systems now have access to reliable application guidelines which also describe installation criteria and conditions of acceptance.

Fire detection technology and evacuation systems will therefore continue to grow closer together in the future. The networking possibilities of fire alarm systems and voice alarm systems offer decisive advantages.

## Possible applications:

### In connection with ESSER fire alarm technology

<b>Background Music</b>	▶ Sports Arenas
	▶ Shopping Centers
<b>Targeted Issuing of Information/Evacuation</b>	▶ Airports
	▶ Theaters
	▶ Train Stations
	▶ In all areas with more than 1,000 visitors
<b>Alarm Announcements</b>	▶ Shopping Centers
	▶ Sports Arenas



With the extensive product range from ESSER, customized and reliable complete fire alarm systems can be realized for every object.



Thanks to their modular structure, ESSER voice alarm systems facilitate the implementation of both small and large solutions for public addressing/background music, alarm and evacuation.

### In connection with care communication solutions from Ackermann clino

<b>Background Music</b>	▶ Hospital Cafeterias
	▶ Nursing Home Cafeterias
<b>Targeted Issuing of Information/Evacuation</b>	▶ Hospitals/Nursing Homes



Flexible and integrated safety and communication concepts can be realized for health care facilities with the systems from Ackermann clino.

# A New Dimension of Voice Alarm



For use everywhere: The new voice alarm systems from ESSER are also suitable for the notification, evacuation and addressing in public or security-sensitive areas.

When networked with the fire alarm system, voice alarm systems give direct instructions for correct behavior during a fire. This is done with stored voice announcements and guarantees that the people in the building are notified in time and are evacuated quickly and orderly. In daily operation, however, these installations are also suitable for piping in background music, for targeted issuing of information or for advertising announcements.

Even in areas with high safety requirements, such as hospitals and care facilities, these systems can be used for many purposes: they not only transmit evacuation instructions, but also patient information or background music. When coupled with a call system, it also becomes possible to transmit alarm reports from the voice alarm system directly to information displays or station terminals.

## Something appealing for every application: VARIODYN® D1

ESSER was quick to act on the expansion of the classic fields of application in voice alarm systems: With VARIODYN® D1, the new product line for trend-setting voice alarm, an exten-

sive product portfolio is available for the most diverse areas of application—from digital communication units and power amplifiers to compact complete systems.



The VARIODYN® D1 system components have appealing designs as well as intuitive operability.



“Plug and play” installation: VA/PA systems from ESSER can be easily connected by plugs; no extensive cabling is necessary.



The Digital Communication Unit can digitally transmit both audio signals as well as operating signals.

# Perfect Symbiosis: Voice Alarms and Fire Detection Technology

Synergies arise through the coupling of the fire alarm system with the voice alarm system, thus facilitating an orderly, area-specific evacuation during emergencies: If a fire is detected by the connected fire detectors and then registered by the fire alarm control panel, this automatically activates the voice alarm system. The endangered areas are then selected automatically and informed via the VA/PA, while at the same time the fire alarm control panel is operating fire protection facilities, for

example, fire doors, air-conditioning and ventilating systems, elevator controls or smoke dampers.

The combination of voice alarm and fire alarm technology not only offers functional advantages, there are economical advantages as well: The automatic selection of alarm zones makes the use of relays and transponders superfluous and thus reduces the need for hardware to a minimum.

## Area by area, targeted and orderly: Evacuation procedure example at the airport



**1.** There is a short-circuit in the baggage sorting area on the 1st sub-level, section B of the airport.



**6.** The fire alarm control panel takes over the elevator control and prevents the elevators from stopping in the affected areas and/or moves the elevator to a pre-defined end position.



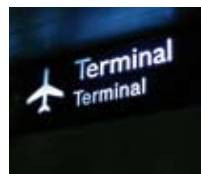
**2.** The fire detector detects the formation of smoke and transmits the information to the fire alarm control panel.



**7.** The VA/PA system automatically initiates an announcement for the immediate evacuation of the affected area.



**3.** The fire alarm system simultaneously initiates alarms to the security services and the voice alarm system.



**8.** The people in the closest area (sub-level 1, arrivals)—one floor above the baggage carousels of the airport section B—are guided to the corresponding exits by specific information. Here, live voice announcements are buffered (e.g., “Last call for passengers for Flight 403 to Berlin”), and the evacuation announcement is played first because of its higher priority.



**4.** The security inspector assesses the situation via the video camera installed on-site and then activates a stored announcement to the personnel with the push of a button.



**5.** Due to the increasing formation of smoke, the fire alarm system automatically locks the fire door in the affected area.

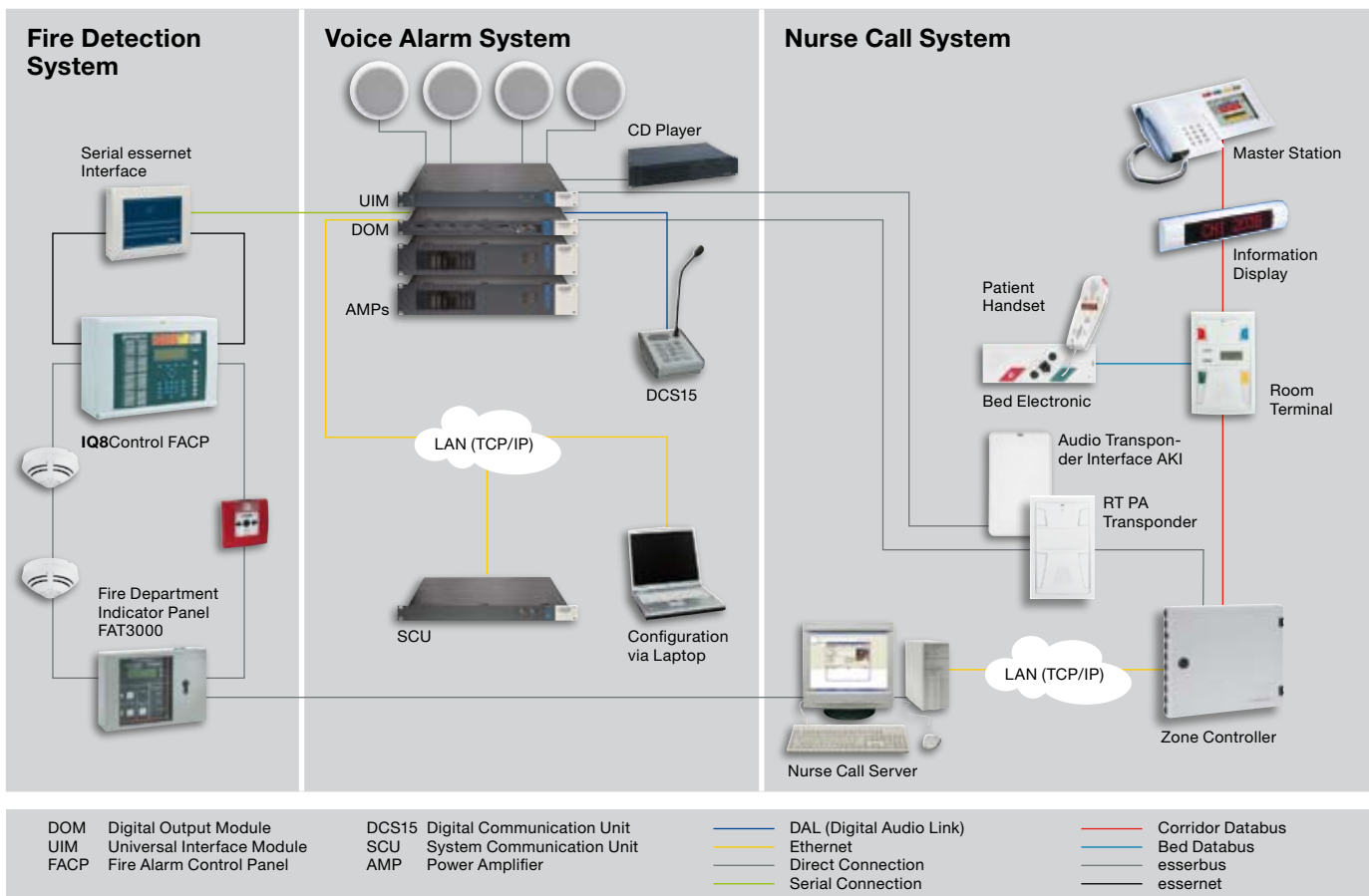


**9.** The fire department arrives.

# Use Synergies across Different Disciplines

Intelligent interfaces facilitate the functional linking of voice alarm, fire detection technology and care communication. Even the transmitting of complex information is possible via this configuration. A Universal Interface Module (UIM) is available for

the connection of external disciplines from other manufacturers. Thus, complex and perfectly matched solutions can be realized which correspond to all on-site requirements.



Basic circuiting for the connection of voice alarm components to fire detection technology and care communication

## Everything from a single source

ESSER offers integrated system solutions for fire alarm technology and voice alarms. The compatibility of individual components simplifies the system design and also guarantees a high degree of installation friendliness as well as simple start-up and maintenance. High flexibility is provided through both the ease of extensibility and the many possibilities for additional connections. User-friendly, Windows-compatible software for project planning and an extensive training program complete this trend-setting concept. During the project planning phase of fire alarm and voice alarm systems, it is important to select the correct product based on the specific intended use. The following table offers an overview and helps to support planning.

Area of Application	Detector Type	Voice Alarm
Senior Citizen Home/ Clinic	O <sup>2</sup> T, OTG, OT <sup>blue</sup>	VARIODYN <sup>®</sup> D1/ VARIODYN <sup>®</sup> D1 Compact *
Shopping Center	O <sup>2</sup> T, OTG, OT <sup>blue</sup>	VARIODYN <sup>®</sup> D1/ VARIODYN <sup>®</sup> D1 Compact *
Airport/Train Station	O <sup>2</sup> T, OTG, OT <sup>blue</sup>	VARIODYN <sup>®</sup> D1
Hotel	O <sup>2</sup> T, OTG, OT <sup>blue</sup>	VARIODYN <sup>®</sup> D1/ VARIODYN <sup>®</sup> D1 Compact *
Museum	O <sup>2</sup> T, OTG, OT <sup>blue</sup>	VARIODYN <sup>®</sup> D1/ VARIODYN <sup>®</sup> D1 Compact *
Theater/Disco	O <sup>2</sup> T, OTG	VARIODYN <sup>®</sup> D1/ VARIODYN <sup>®</sup> D1 Compact *
Underground Parking Garage	T	VARIODYN <sup>®</sup> D1/ VARIODYN <sup>®</sup> D1 Compact *
Event Hall	O <sup>2</sup> T, OTG, OT <sup>blue</sup>	VARIODYN <sup>®</sup> D1

\* The selection of the system depends on the object size.

Your specialists:

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**Novar GmbH a Honeywell Company**

Dieselstraße 2  
41469 Neuss, Germany  
Phone: +49 2137 17-0 (Administration)  
Phone: +49 2137 17-600 (Customer Service Center)  
Fax: +49 2137 17-286  
Internet: [www.esser-systems.com](http://www.esser-systems.com)  
E-mail: [info@esser-systems.com](mailto:info@esser-systems.com)

**Honeywell Life Safety Austria GmbH**

Lemböckgasse 49  
1230 Vienna, Austria  
Phone: +43 1 600 6030  
Fax: +43 1 600 6030-900  
Internet: [www.hls-austria.at](http://www.hls-austria.at)  
E-mail: [hls-austria@honeywell.com](mailto:hls-austria@honeywell.com)

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