

# SYSTEMS AND SOLUTIONS for health care facilities and hospitals

Taking care of everyone: **Together, safely** 

# Health is not relative. Neither is safety.

The specific demands of hospitals and care facilities combined with today's safety requirements for patients and residents, means that emergency, life-saving safety technology is needed. At the very least, the safety system must be both easy to operate and 100% reliable.

Whether it is a question of bringing existing facilities up to date with state of the art technology or designing new buildings, any plan needs to take individual requirements into account. Different stations and buildings must be flawlessly connected in order to create a security system that protects those who require it.

A further point of consideration when installing security technology is that those who invest in trustworthy equipment, and look for reliable partners, can be sure that the costs of their investments are not only crystal clear and transparent from the outset, but also pay off in the longer-term. After all, durable, high-quality technology is always the right economic choice. With TOA devices, you can be confident that, once installed, they'll spend the coming years and decades doing exactly what they were purchased for: ensuring safety. This includes an accurate, robust planning of the systems as well as a diligent installation. Any unique requirements of the respective facilities are considered, as well as providing a future-proofed technology.

# Reliability and functionality at the highest level.

Modern digital and networked systems are continuously being developed further. Meaning that installed systems can evolve as required in future. In this way, security and communication systems are created that help and protect people, year after year.

With long-term experienced partners, TOA offers reliable and future-proofed solutions with individual project development, transparent budget planning and conscientious project support. In this way, our customers receive an effective and economical solution that can grow over many years with future requirements.

We develop the perfect solution according to your wishes: all in proven, reliable TOA quality.

# Technical equipment according to CAN/ ULC-S524 – prepare for the future right now.

Today, we are positioned better than ever to react to emergencies and hazards. In a world first, CAN/ULC-S524 regulates the requirements for technical systems which, in emergencies and hazardous situations, re-port an event, verify it via direct communication and, if necessary, warn and instruct affected persons. Thus supporting the necessary crisis management measures and expanding the ability to keep people safe.

As powerful ELA systems, TOA voice alarm systems can be used for individual announcements to inform employees or patients. Targeted zone control ensures that people are not distracted or disturbed by unnec-essary messages. Automated notifications contribute to safety in public areas. A music sound system adapted to the respective environment via the existing loudspeak-ers creates a pleasant atmosphere. In an emergency, the announcements of the alarm are prioritized - the integration of voice alarm and intercom thus provides additional security because important information is not superimposed.

In an emergency, the announcements of the alarm are prioritized - as such, the integration of voice alarm and intercom provides additional security because important information is not obscured by other noise. In sensitive areas it makes sense to use a security system that is not adversely affected by unfavourable circumstances. With TOA, you can ensure that the system is available even in the event of a power failure. Continuous automatic system monitoring prevents unnoticed system failure. By using Intercom systems, you make your security system independent of computer servers. And last but not least, you can also design your system barrier-free through the use of appropriate call stations, thus ensuring participation and inclusion. We believe that a good security concept is based around looking at the most vulnerable areas, and making sure they're better protected. Therefore TOA offers effective and proven technical equipment.



# Perfectly combining a pleasant ambience with danger prevention.

In care facilities, public address systems can perform multiple tasks. From improving the atmosphere through background music to information for residents, notifications for employees and emergency alarms. Even the security of rooms that are not publicly accessible or access control for certain buildings can be integrated into a security system. Despite its complexity, such a system must be designed to be operable by every employee.

The special requirements of patients and elderly people leads to unique challenges in man aging a d angerous, emergency situation. In such scenarios, voice alarming comes into its own because alarming via voice announcements leads to faster and smoother evacuation of danger areas than alarming with acoustic signals. Even people who are not familiar with the area can be specifically addressed - in a variety of languages - in order to safely extricate them from the danger zone. Voice alarming can also quickly and safely eliminate a potential false alarm. The associated operational disruptions and risks for patients can be effectively prevented or, at the very least, reduced.

Additional safety for staff and occupants is provided by multi-sensory microphone units and induction loops that amplify emergency announcements for hearing aid users.





# **EXAMPLE COMPONENTS**

## Resident's room

#### **PC-580RU**

ULC certified ceiling speaker

- UL 2043 with HY-BC580U
- Easy installation
- Firedome prevents passing the flames into the ceiling

#### **Q-RS180BZ: SUB STATION** Emergency station

- Water resistance button
- Emergency and Braille signage
- Call-Button allows everyday communication
- LED indicator and control output

## **Technical room / central**



**VM-3240VA AMQ** UL 2572 and CAN/ULC-S576 Certified

Up to 4 amps (1 zone -1 amp, 4 AB-zones or 3 AB zones + standby amp))

### **DA-250DH**

- 2-Channel Digital Power Amplifier - 70 V
- 250 W x 2 channels

#### **VX-2000DS**

- Combination of two builtin power source units with a high-performance charger
- Automatically switch to auxiliary battery power if the AC power supply is down

### Entrance area

#### N-SP80AS1

Digital door station

- Robust and weatherproof hardware
- Built-in AEC (acoustic echo canceller)
- enables intelligible full-duplex communication
- Flexible LED and behavior setting
- Anti-vandal function via external control input

#### N-SP80VS1

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#### SIP video door station

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- Robust and weatherproof
- Full-duplex communication

## Reception

#### **N-SP80MS1** SIP multimedia station

Intuitive operation with 7-inch touch screen and dial keys



## Car park / outdoor area



#### N-8640DS

IP Door station

- For outdoor use
- Hands-free conversation
- High sound quality •
- Status LED •

#### SC-630TU

Horn speaker

- UL 1480 UUMW & ULC-S541
- Excellent speech clarity
- High SPL

## Kitchen / Cafeteria

#### PC-1860 / S

- Easy installation
- Spring clamp mechanism for easy mounting

#### PE-304WU/BU

UL 1480 UUMW and ULC-S541

- Special design to blend with lighting equipment
- Excellent sould quality
- Wide range frequency response

## **Common rooms / Chapel**

#### WT-5800 Receiver





#### WM-5270

Handheld microphone

Dynamic vocal microphone with a cardioid pickup pattern with excellent sound characteristics

#### **BS-680U**

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Wall-Mount Box Speaker

- UL 1480 and ULC-S541
- Quick and easy installation

- Multiple mounting options











# SOUND FOR HOSPITALS

# Reliable communication with perfect speech intelligibility–practical in everyday life, ready for any emergency.

An intercom system connects treatment rooms, waiting areas, doctors' and nurses' rooms with each other, for simple and secure communication across several buildings. Both the connection of several **conversations** and the automatic operation of a call station via a hands-free operation make the system compatible for any location. And the transmission quality always remains first-class with TOA systems.

Existing technical hardware does not restrict the introduction of new technologies either. Our systems can be connected to and integrated into networks. The voice alarm system uses the same loudspeakers for background music and general announcements. And the intelligent programming of the system ensures that the most important information is always distributed at the highest priority. Expensive and superfluous double wiring and the installation of several loudspeakers can be avoided, if one unit successfully performs all tasks.

Our public address systems enable you to make contact and provide information exactly as the occasion requires - be it a general announcement, a notification in several areas or in one specific zone. And the most important thing: you will not only be heard, but clearly understood. Through the integration of our systems, your announcements always have the appropriate priority, never get lost in background noise and reach the recipients with the best possible speech intelligibility. TOA's systems ensure the best speech intelligibility, especially where there must be no ambiguity in communication. Integrate areas with special requirements through appropriately adapted devices: for example, through microphone units that can be used hands-free, or through devices that can even be serviced without direct access. Best solutions for operating theatres or sterile rooms.

# **EXAMPLE COMPONENTS**

## Doctors' / nurses' room

**Foyer** 

**BS-1030B** 

Wall speaker

speaker

ance with IPX4

2-way bass reflex speaker

Various installation options

Cost-effective high power PA box

Splashproof construction in compli-

#### N-8600MS

- IP multifunctional Master Station
- With LCD display
- Hands-free or handset conversation
- Auto-dialer function
- Headset terminal
- High sound quality .
- . Status LED
- . PoE

AM-CF1

External speaker terminal





## **Technical central**

Status LED

Contact input

High sound quality

**Operating rooms** N-8033MS

IP 65

#### **VM-3240VA AMQ**

UL 2572 and CAN/ULC-S576 Certified

Max. 13 MIC/LINE Inputs

Flush-Mount hands-free Master Station

Chemical resistant (clean room)

Hands-free conversation

- Up to 4 amps (1 zone -1 amp, 4 AB-zones or 3 AB zones + standby amp)
- Paging (All zones/Group/ Individual)
- Max. 60 assignable speaker zone
- Zone setting, priority setting, failure detection
- Built-in voice alarm message

#### **N-8000EX**

IP network intercom exchange

• Up to 16 microphone units can be connected

- Analog centreal office line circuit to make and receive calls from the telephone line

Audio interface unit

Diagnose system line and network status

#### N-8000SG

- SIP-Gateway
- Connection between Intercom and public telephone network
- Forwarding of emergency call initiation to a control centre

## **Common rooms / Chapel**



#### Wide dispersion ceiling speaker

- Excellent sound quality High power
- Quick and easy installation



#### **BS-678**

- Stylish, compact and unobtrusive
- Quick and easy wall-mount installation
- Cost-effective
- Universal use, suitable for BGM

#### A-2060D

- Digital mixer amplifier
- 3 microphone inputs, 2 AUX inputs and 1 recording output
- Phantom power and mute function

- Clear sound with reduced attenuation over distance
- Reflection free and feedback resistant







- N-8000CO C/O Interface unit

#### N-8000AF

Networked conference room









High quality audio supports natural conversation at a distance TOA's proprietary real-time steering array micro-phone technology offers ideal sound collection

Audio collaboration system

- Easily connectable via USB for a PC-based web conference and for USB-connectable camera























# Integrated system solutions for every type of application.

# Voice alarm systems

From simple public address systems to highly complex object monitoring, our public address and voice alarm systems are distinguished by their remarkable versatility and reliability. In addition to outstanding audio quality, our systems help to create a safe environment for the public. In the event of danger, your ELA system ensures that visitors are addressed and this is optimised in two respects: On the one hand, your alarm system reaches exactly the people you need to reach. On the other, the announcements are adapted to any background noise and made accordingly as loud as required – all whilst maintaining the best possible speech intelligibility. Whether all persons in the building need to be reached or only a certain area requires your announcement, each zone is notified clearly and unambiguously.

# Intercom systems

Our intercom systems are suitable for a wide range of applications. We not only offer a broad product portfolio, but can also adapt the devices to your specific requirements. For example, an intercom system enhances the effectiveness of your voice alarm system even further: After an alarm has been triggered, precisely tailored measures can be taken – not only because the call receiver is available to assist the person seeking help directly, but also because announcements and instructions reach all required destinations without any problems. unication or managing emergencies and dangers: your TOA Intercom system is the reliable partner at your side.



# **Speakers**

Whether required for music, alarm, announcements, or you need positionally versatile ceiling, wall or horn loudspeakers, durable weatherproof, UL-certified or **Pro** speakers – we have a vast portfolio of loudspeakers offering the optimum solution for every requirement, whatever the location. TOA loudspeakers all have one thing in common – excellent sound!

# PA/Sound systems

For many events music plays an essential role, and yet the audio requirements are always different. Your TOA sound system offers the best possible sound for all planned occasions and events, because our systems can not only transmit music, but also speech. All, of course, wirelessly. And on a technical level our solutions certainly don't sound like a compromise, but are uncompromisingly good.

# Wireless line up

With our range of wireless microphones and radio transmission products, we cover the entire spectrum of possible applications. From presentations to concert sound reinforcement, from conference rooms to theatres: for your specific project we select the perfect equipment from all the possibilities. Whether lavalier or hand-held microphone, fixed installation or mobile racks, we've got every usage requirement covered. All optimised for speech, vocals or instruments.

# TOA'S SERVICES

# We don't recommend things frivolously – we know what we're talking about. And we can prove it.

Together we will find the optimal sound solution for your care facility or clinic. Naturally, we take all applicable legal regulations into account. We also provide you with equipment that has been com-

- The integration of a sound system into your existing fire protection system not only enables optimum technical coordination of the devices, but also a cost-efficient ProSound system with all the features you need.
- Your advantage: merging the sound set-up into one system with **no mix of manufacturers** means that everything fits seamlessly.
- Exceptionally **quick and easy installation** of the components of your system
- We offer you tailor-made solutions for your unique location and we ensure the best possible equipment for your rooms by rendering extensive simulations of the acoustic conditions. The perfect combination of sound system and voice alarm system ensures operational safety, and the satisfaction of having done everything possible for the safety of your visitors.
- Or with a network-based voice alarm center, with decentralized design for additional security
  We work together with certified local partners.
  And while they know what the minimum requirements are, they pride themselves on knowing
- how to provide even greater security.

prehensively certified. That's why you can be sure: With TOA you achieve the right volume for all acoustic zones with the best speech intelligibility. At the same time, we offer many other advantages.

- Our systems are optimally equipped for emergencies with emergency power equipment; A/B cabling or ring cabling.
- The quality of our products means that they're designed to last, and we back this up with the best customer service.
- We are there for you beyond the installation of your system – offering continued **support and service**, both from our specialist workshop and from our trained partners.

# **Our service for you includes:**

- Provision of technical documentation (drawings, manuals, specifications etc.)
- Planning support
- Acoustic Simulation and Consulting
- Project-related product configuration
- Support during installation commissioning
- Repairs and technical service



# USE OUR EXPERTISE

# So what can we do for you?

- > Enhancement of existing safety concepts
- > Reaction systems for patients and visitors two-way communication through barrier-free call stations
- > Direct, effective communication with employees and, if required, hands-free
- > Enhancement over a standard alarm system with targeted voice announcements
- > Increased security through complete impedance monitoring
- > Additional safety through own, independent emergency power supply
- Announcements have maximum speech intelligibility whether set up automatically or for a specific occasion, for an entire building or only certain areas
- Supporting the well-being of employees and customers by creating a nicer, more calming ambience via background sound
- Problem-free integration of TOA technology into existing security systems

# What does TOA offer?

With TOA you have the choice between various fully UL-certified voice alarm systems, which are then optimized according to your project and required application. In any case, TOA speech alarm systems combine maximum security with uncomplicated emergency handling through fully automatic operation.

In cooperation with your specialist planner, we support you right from the planning phase with acoustic simulations – even of difficult rooms – and focused on your specific user requirements. You can take us at our word.

# Planning a health care facility? Please contact us

We support you in the planning and project management of your property and take care of your questions and concerns!

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#### We supply sound, not equipment. www.TOAcanada.com

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