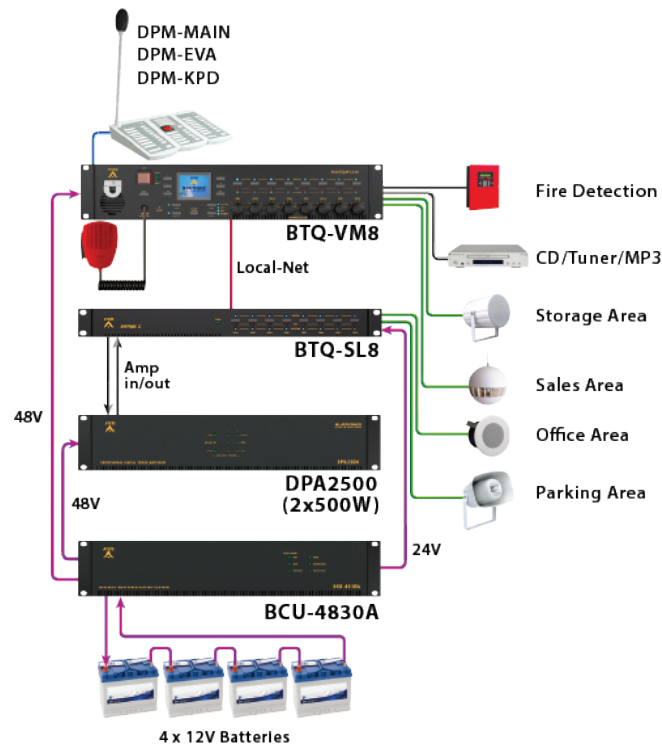# SUPERMARKET PA SYSTEM

ADVANTAGES

- Compact, cost-effective solution for small to medium sized installations.
- Modular system according to EN54-16, EN54-4 and EN54-24 standards.

The implementation of a Public Address System in a supermarket must meet several requirements, the system must create an attractive and musical atmosphere, enhance the shopping experience for customers. The system has to perform clear distribution of messages, live broadcasting and emergency evacuation to the whole point of sale in accordance with the EN54 standard. A supermarket is between 400 and 2500 m².

APPLICATION EXAMPLE

ATEÏS Europe B.V.
Celsiusstraat 1, 2652 XN Lansingerland, Netherlands
Phone +31 (0)10 208 86 90, www.ateis-europe.com, info@ateis-europe.com

SOLUTION

The **BOUTIQUE Public Address system** provides paging, BGM broadcasting, evacuation and alarm messages, to multi-zone in accordance with EN54-16, EN54-4 and EN54-24 requirements. The BOUTIQUE controller **BTQ-VM8** offers 8 monitored speaker zones. It incorporates Digital Signal Processing (DSP), a digital message player with up to 45 minutes message storage, a supervised fireman microphone, monitoring of amplifiers, speaker lines, and intelligent auto switching on standby amplifier and backup.

The **BTQ-SL8** secondary unit extends the BOUTIQUE system. It increases the number of zones by a further 8 zones. Up to 31 units can be added per controller via a dedicated digilink.

The built-in event and scheduler function allows to program the cyclic distribution of informative and commercial messages. The two **DPM-MAIN** desks located in the reception area and the offices and can be used to distribute live announcements. The DPM-MAIN is equipped with 8 button keys to select zones/groups of zones as well as a general all-call key button. These keys can be easily configured via BOUTIQUE web browser interface. The pre-chime and post-chime can be added before announcements. Each DPM-MAIN is attached to one DPM-EVA and one DPM-KPD. The **DPM-EVA** is a monitoring speaker pad with an EVAC button and 5 programmable buttons and the **DPM-KPD** is a keypad used to expand keys of the DPM-MAIN.

This application uses one **DPA2500** which is an external amplifier (speech and music) for all of the speakers. It intergrates 2 channels of 500 Watts. This amplifier is a class-D digital power with extremely low power consumption (0.2 W per channel) during standby mode, and high amplification efficiency of 90%.

The **BCU-4830A** is a battery charger designed for secured backup and power sharing of BOUTIQUE systems and external power amplifier. It charges lead acid batteries and monitors the battery status simultaneously. It can maximize the capacity utilization of the 4 battery cells and increase their longevity. The main power output of BCU-4830A is 30 A max. and the maximum charging current of BCU-4830A is 3 A.

The **CAD10T/EN** white ABS sound projectors are equipped in the storage area, the **GB20T/EN** omni-directional spherical speaker is equipped in the sales area, the metal **RCS5FT/EN** ceiling speaker is placed in the offices and the **MSH30T/EN** compression chambers in the parking area. These loudspeakers are certified and complied to EN54-24.

ADVICES

In the sales area, install a GB20T/EN speaker at a height between 3.5 and 5 meters for 150 m².

In the parking area, install a MSH30T/EN speaker every 150 m².

Connect the speaker lines in CR1 C1 in 2 x 1.5 mm² or in 2 x 2.5 mm². The standard provides 32 speakers per line.

REQUIREMENTS

Distribution of clear alert/evacuation messages.

BGM in shopping areas can be interrupted for announcements and advertisements.

BGM broadcasting and live announcements.

Fully supervision including general surveillance, speaker line monitoring, digital message management etc.

Cyclic distribution of informative and commercial messages.

Coverage of 4 areas: storage area, sales area, offices, parking.

Distribution of individual/group of zone(s).

2 music inputs (CD/tuner/MP3 etc.).

Complied to EN54-16, EN54-4 and EN54-24.

BASIC CONFIGURATION

For an area of 1200 m²

1 BTQ-VM8	Compact PA/VA controller with 8 monitored speakers zones
1 BTQ-SL8	Expansion of BOUTIQUE System by 8 zones
2 DPM-MAIN	8 zones call station
1 DPM-KPD	Additional 8+1 microphone keypad
1 DPM-EVA	EVAC unit with speakers and extra buttons
1 DPA2500	2 x 500 Watt Class-D amplifier
1 BCU-4830A	Monitoring battery charger
4 12V batteries 60 Ah	Batteries 12 V / 60 Ah
6 CAD10T/EN	5 Watt ABS sound projectors Storage area
6 GB20T/EN	20 Watt omni-directional spherical speaker - Sales area
5 RCS5FT/EN	6 Watt metal ceiling speaker Office area
4 MSH30T/EN	30 Watt ABS compression chamber - Parking area

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