



BOX-500

ORDER NO. S20000-00

The NSC BOX-500 is a compact EN 54-16 certified public address and voice alarm system that ensures a fast, safe and controlled emergency evacuation.

DESCRIPTION :

BOX-500 is the most versatile and cost-effective PA/VA system due to innovative features, excellent audio quality and flexibility in minimum space. It features 2 class D amplifiers, 6 zones, 3 audio inputs, 6x6 audio matrix, DSP and LCD display.

The system can be configured without software or PC, thanks to the Plug & Play mode for PA/VA.

Audio inputs and automatic mixing allow high versatility for PA use in small installations.

BOX-500 can be equipped with an EN 54-4 certified battery charger and operates from a single 12V battery only. This feature and its advanced power saving control reduces maintenance costs to the maximum.

An innovative enclosure design makes BOX-500 suitable for wall mounting and integration in a 19" rack.

VOICE ALARM/EMERGENCY FEATURES :

- Certified according EN 54-4 & EN 54-16 and for use in systems according EN 60849
- Failure detection and indication of all emergency functions
- Fire Alarm Control Panel integration
- Double message player with storage for pre-recorded evacuation messages up to 10 minutes
- Manual control of emergency states with access control
- Emergency log
- Loudspeaker line supervision, with optional End of Line module (no return line needed)
- Backup amplifier included

GENERAL FEATURES:

- 3 audio inputs
- Up to 8 MCS-8Z multizone call stations or FP-AC fire panels connected using CAT5 UTP cable
- 2 class D amplifiers with two configurations for 100V/70V lines up to 500W total for 6 lines
- Digital audio matrix 6x6, expandable
- 4 pre-amp outputs to connect with external PA amplifiers
- DSP: 3/7-band input/output parametric EQ, loudness, sound enhancer, independent volume control for each input and master output
- Access control by LCD character display with backlight
- Control outputs for up to 16 100V attenuators
- 8+2 GPIO ports, including supervision of the connection with a Fire Alarm system

TECHNICAL SPECIFICATIONS

Model	BOX-500
Power supply	100 - 240V~ 50/60Hz
Power consumption	350W max / 100W at 1/8 output power
Frequency response	80 ▫ 20000Hz +/-1dB
Signal to noise ratio	SNR~95dB, A-weighted
Distortion factor	<0.1% according to IEC 60268
Gain adjustment per channel	-100dB +10dB, 1dB steps
DSP	Integrated - 48 kHz, 24 bits - 344 MIPS
BGM audio inputs	1 x balanced audio 1 Vrms. 10 K Ω , 3 Pin, Euroblock type
Priority audio inputs	2 x balanced audio 1 Vrms. 10 K Ω , 4 Pin, Euroblock type (GPIO)
General control (GPIO)	2 x control I/O, 0-5 V, 100 Ω , in PRIO audio inputs
LDA ACSI Bus	1 x balanced audio 1 Vrms. 10 K Ω , RJ-45 female, total 800m / 2624.7ft
ACSI-Link connectivity	2 x balanced audio 1 Vrms. 10 K Ω , RJ-45 female, total 800m / 2624.7ft
Pre-amp audio outputs	4 x balanced audio 1 Vrms. 100 Ω , 3 Pin, Euroblock type
Attenuators control	6 x override 24V DC, 6 x 30mA, 2 Pin, Euroblock type (4 pin connector)
Emergency control inputs	8 x 0 - 5V DC, monitored inputs, 2 Pin, Euroblock type (4 pin connector)
Emergency control outputs	2 x contact closure output, NO, max 60V DC 130mA, 2 Pin, Euroblock type (4 pin connector)
Virtual matrix	15 x 24 maximum
Amplifier	2 x 500W class D (2x 250Wrms) @ 70 / 100V. Min load 20 Ω
Backup amplifiers	1 backup amplifier with automatic priority according to EN 54-16
Speaker line outputs	6 x 100V; Min. impedance: 20 Ω / 500W (outputs 1 & 2), 80 Ω / 120W (outputs 3, 4, 5 & 6), 2 Pin, Euroblock type
Output power	500 W according to EN60065. 200 Wrms according to EN 54-16
Protection	Over-temperature, infrasonic, short circuit, slow start-up, overload
Emergency power	181 x 76 x 167mm battery housing, up to 22Ah
Battery charger	Integrated, smart charging up to 3 amperes
Display	LCD 2 rows x 16 characters with backlight
Operation conditions	-5 $^{\circ}$ C to +45 $^{\circ}$ C / 23 $^{\circ}$ F to 113 $^{\circ}$ F 5% to 95% relative humidity (without condensation)
Finish	Materials: Fe y AL Colours: RAL7036 and RAL9005
Weight	7.5 Kg / 15.76 lb
Dimensions (W x H x D)	453mm x 88mm x 455mm / 18.2 \square x 3.46 \square x 18 \square