



## MILO 8120

ORDER NO. S21000-00

NSC MILO 8120 Voice Alarm Controller & Amplifier is a compact EN 54-16 certified PA/VA system that ensures a fast, safe and controlled phased emergency evacuation.

### DESCRIPTION :

MILO represents a cost-effective combined Public Address and Voice Alarm system due to innovative features, excellent audio quality and flexibility: i.a. 8 class D amplifiers for loads up to 120W at 100V/70V, backup amplifier function, switch mode power supply, 5 audio inputs, 8x8 audio matrix (40x1024 digital), touch screen display and Audio over IP.

The MILO Configurator software allows remote configuration of the system and to create events in order to perform actions in the system, triggered by conditions such as input level, date & time, UDP commands, a GPIO or a button from the MCS multizone call station.

### VOICE ALARM/EMERGENCY FEATURES :

- Certified according EN 54-16 and for use according EN 50849 (Sound systems for emergency purposes).
- Detection and indication of failure in all emergency functions & Emergency log.
- Integration with Fire Alarm Control Panels.
- Pre-recorded evacuation messages & phased evacuation
- Manual control of emergency states with access control.
- Recording output in emergency state.
- loudspeaker line supervision & A+B connection (16 lines)
- Back up amplifier connection: 7+1 (120W channels).

### APPLICATIONS:

- Hospitality venues
- Shopping malls / Retail / Office buildings
- Sports facilities Multi-purpose venues
- Schools and Universities / Public buildings
- Entertainment/Leisure parks
- Transportation

### KEY FEATURES:

- 5 audio inputs, 2 internal pre-recorded messages and 1 frontal PTT microphone
- Audio Matrix 8x8 (digital up to 40x1024)
- 8 class D amplifiers for 100V/70V speaker lines: up to 120W loads per channel
- If required, 1 or more channels can be configured as backup amplifier to substitute a faulty amplifier channel within the same unit.
- Up to 16 (8 A&B) supervised loudspeaker lines.
- Optional supervision of the loudspeaker line via return line, for most reliable line monitoring
- 8 pre-amp outputs to link external PA amplifiers
- Up to 8 multi-zone microphones MPS-8Z or VAP-1 panels connected with CAT5 UTP cable.
- Integrated DSP with 7-band input/output Parametric Equalizer, loudness, sound enhancer, independent volume control per each I/O channel and audio filters.
- Triple Ethernet port: for Digital Audio over IP (CobraNet®), remote control & supervision and to extend the system with MILO Extension Matrix Amplifiers in daisy-chain mode with Flexnet technology (up to 1024 zones).
- 4,3" Frontal touch screen with access control.
- 4GB of internal memory for pre-recorded messages.
- Integrated emergency microphone.
- Control for up to 32 100V attenuators.
- Integrated frontal loudspeaker for monitoring.
- 22 GPIO ports (10 supervised relay contact inputs for integration with a Fire Alarm System).
- 24VDC secondary power supply

## TECHNICAL SPECIFICATIONS

MODEL	NSC MILO 8120
Power supply	110-120V / 220-240V~ 50/60Hz
Power consumption	550W max / 100W at 1/8 output power
Frequency response	20 - 20.000Hz +/-1dB
Signal to noise ratio	>98dB, A-weighted
Distortion factor	<0,05%
Gain adjustment per channel	-100dB -0dB, 1dB steps
DSP	Integrated. 48 kHz, 24 bits - 344 MIPS
FlexNet (Cobranet + Control)	2 x FlexNet Redundant (automatic switching)/ Cobranet, Ethernet10/100Mbits. Female RJ-45
Audio Inputs	5 x Balanced audio 1Vp, 0,707Vrms. 10 K $\Omega$ , 3Pin, Euroblock Type
ACSI Bus	1 x Balanced audio 1Vp, 0,707Vrms. 10 K $\Omega$ , Female RJ-45, Total 800m. / 2624,7ft
Pre-amp Audio Outputs	8 x Balanced audio 1Vp, 0,707Vrms. 100 $\Omega$ , 3Pin, Euroblock Type
Rec. Audio / Ctrl. Outputs	1 x Balanced audio, 1Vp, 0,707Vrms. 100 $\Omega$ / 0 - 5V DC output 100 $\Omega$ , 4Pin, Euroblock Type
Attenuator Control	8 x Override 24V DC, 8 x 40mA, 2 Pin, Euroblock Type (4 pin connector)
Emergency Control Inputs	10 x 0 - 5V DC, Monitored inputs, 2 Pin, Euroblock Type (4 pin connector)
Emergency Control Outputs	2 x Relay contact Isolated Output, NO, Max 60V DC 130mA, 2 Pin Euroblock Type (4 pin connector)
General control (GPIO)	14 x Control I/O, 0 - 5 V, 100 $\Omega$ , 3Pin, Euroblock Type
Virtual matrix	32 x 1024
Amplifier	8 x 120W Class D, 60Wrms x 8 @ 70 / 100V. Min load 166 $\Omega$
Loudspeaker Outputs	16 x (8 A&B, dual managed lines) 70 /100V. 2 Pin, Euroblock Type (4 pin connector)
Loudspeaker Line Return Loop Input	16 x (8 A&B, dual inputs) No Voltage Contact, 3 Pin, Euroblock Type.
Spare Amplifier Inputs	8 x 120Wmusic/60Wrms at 70 or 100V, 2 Pin, Euroblock Type (4 pin connector)
Protection	Over-temperature, DC, infrasonic, short circuit, slow start-up, overload. Start-up test.
Emergency Power Input	1 x 20 - 25V DC, 20A, Fused, 2 Pin, Euroblock Type.
Emergency Power Status Inputs	3 x NO - NC, 3 Pin, Euroblock Type
Display	TFT 480x272 4,3" with Touch Panel
Operating Condition	-5 $^{\circ}$ C to +45 $^{\circ}$ C / 23 $^{\circ}$ F to 113 $^{\circ}$ F 5% to 95% Relative humidity (No condensation)
Finish	Front: Fe, Grey RAL 7036 Back: Fe, Black RAL 9005 Case: Al, Black RAL 9005
Weight	13,5 Kg / 29.76 lb
Dimensions (W x H x D)	483mm x 88mm x 455mm / 19" x 3,46" x 18"
Accessory	2 x Rack mounting, Male Euroblock connectors, installation screws, 4 x Rubber foot, 1 x Power cable 2m / 6,56ft (EU Type), 1 x Ethernet Cable 2m / 6,56ft.