

Hacousto Holland bv Industrieweg 87 2651BC Berkel & Rodenrijs		
4EVAC Compact 500 datasheet	Author: DD	
	Design revision:	2.0




SUMMARY

This document is the datasheet of Compact 500 Voice Evacuation System. It defines reference technical specifications of the system.

REVISION AND APPROVAL

Rev.	Date	Nature of Changes	Approved By
01	17-01-2018	Original draft	DD

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4EVAC Compact 500 Technical specifications

Standalone system	
Number of zones	max. 6 local zones
Maximum total loudspeaker load	600 W RMS (420W RMS pure sinewave according to EN54-16)
Power amplifiers	6 x 100 W, modular (2 channels per module), bridgeable up to 3 x 200 W
Standby power amplifiers	2 x 100 W / 1 x 200 W dedicated backup amplifiers
Loudspeaker line monitoring	
Built-in	20kHz AC monitoring with EOL module, short/open/impedance deviation
Loopdrive	loop DC monitoring with short-circuit isolators, short/open/earth leakage, EN54-17 certified
Loudspeaker type	with 100V step-down transformer
Voice messages	
Storage	max. 16 audio files x 1 minute each, micro-SD card with content monitoring
Message player	Max. 2 simultaneous local message playback
Controls and indications	
General controls / indications	Lamp test button, silence button, power, evac, general fault LED indicators
Fault indications	Power supply, system fault, network, zone fault
Zone controls / indications	6 x configurable zone selection button, zone EVAC/FAULT/BUSY LED indicators
Evac manual control	EVAC message, ALERT message, SILENCE, RESET, fireman mic with PTT button
Fireman microphone	Integrated Fireman Mic with priority and electrical monitoring
Power supply equipment	Built-in power supply system, EN 54-4 certified.
AC supply	110 – 230 V AC, 50/60Hz
AC current consumption	max. 5.3A @115V AC / 2.65A @230V AC
Inrush current	20A @115V AC, 40A @230V AC
Power supply protection	Overload current limiting, over voltage shutdown, over temperature shutdown.
Battery requirements	
Type	Sealed, rechargeable lead-acid battery for stationary use
Capacity	10 – 55 Ah
Charging time (80% capacity)	< 24 h
Rated voltage	24 V DC (2 x 12V)
Battery dimensions	2 batteries, each of max. 230 x 138 x 207 mm (LxWxH)
Battery weight	max. total 32.6 kg
Inputs	
2 x BGM	2 x independent balanced analogue in, line-level mono, 22kΩ input impedance
6x EVAC in, 1x SILENCE in, 1x RESET in	monitored logic inputs, 4.7kΩ +10kΩ EOL resistors
8 x GPI	unmonitored logic inputs (pull-down, configurable active low/hi)
Outputs	
EVAC out, FAULT out	Potential-free relay output (configurable NO/NC)
GPO	8 x Open collector output (configurable NO/NC)
Loudspeaker out	6 x 100V transformer output, 20 kHz AC monitoring with EOL
Amplifiers	
Type	Class D
Protection	over load shutdown, over temperature shutdown
Backup amplifiers	2 dedicated backup channels, auto backup at end stage failure, auto restore
Efficiency	80% @ rated power
Output voltage	max. 100V RMS
Rated power	100W per channel, 200W bridged
Output bandwidth	50 Hz – 20 kHz
SNR	>80 dB
THD + N	0.1% @ rated power

Audio	
Frequency response	
Local BGM	50 Hz – 20 kHz
Messages, network streaming	100 Hz – 12 kHz
Analog input- output latency	< 10 ms (stand-alone system)
Network audio stream format	24 kHz sampling, ADPCM compressed
Message file input format	24 kHz, 16 bit, mono WAV
DSP features	HP/LP filter, multipoint parametric EQ, delay
Mechanical	
Dimensions (HxWxD)	80 x 52 x 28 cm
Weight (full config, without batteries)	29 kg
Housing material	Steel / ABS
IP rating	IP 30
Mounting	Wall-mounted box

Network system

Max. number of devices in the network	255
Max. number of zones	255
Max. total system output power	102 kW
Number of simultaneous network audio channels	2
Network audio transmission latency	0.3 ms per device
Local network	
Architecture	Master-slave, up to 16 slave devices per C500 main unit
Connection	3 x L-Net port, RJ-45, powered daisy chain, digital audio & control data
Cabling	X-over FTP CAT5e (or higher)
Current consumption	max. 500 mA (up to 8 slave devices) per L-Net port,
Max. length of local bus	
default	250 m
with twisted-pair extender	500 m
Global network	
Architecture	Peer-to-peer, up to 255 C500 main units
Connection	2 x G-Net port, RJ-45, powered redundant ring, digital audio & control data
Cabling	X-over FTP CAT5e (or higher) / multimode optical fiber
Current consumption	max. 500 mA per port, reserved only for network extenders
Max. distance between devices	
default	250 m
with copper extenders	750 m
with fiber extenders	2500 m

All information provided in this document is subject to change without notice. 4EVAC may also make improvements and/or changes in the products described in this information at any time without notice.

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