



DIVA8M G2

COMPACT PAVA SYSTEM – MASTER UNIT



DIVA8 system is a compact PAVA solution specifically designed for small to medium-scale installations. It has all the essential functionality to comply with EN 54 requirements for Voice Alarm, including full system monitoring, loudspeaker line impedance surveillance, microphone surveillance and monitored interfacing with remote devices.

DIVA8 responds to Public Address and Voice Alarm requirements as stated in EN54-16, ISO 7240-16 and BS5839/8, with specific attributes for compliance in large installations.

MAIN CHARACTERISTICS

- DIVA8 System Master Public address and emergency sound system control unit
- 8-zone system controller with individual volume controls per channel
- 2 channel audio distribution for Paging and BGM
- Combined back-up amplifier function
- 5 audio inputs
- 2 x 1000 Watt maximum load
- Enhanced loudspeaker line surveillance for A/B zoned installations
- 9 monitored control inputs
- 8 logic control inputs
- Ethernet interface for configuration, control, diagnostics and logging
- Third party control
- Digital storage for up to 45 minutes of pre-recorded messaging
- Stores the last 999 fault events
- 3,5" colour touch-screen
- EN54-16 certified

CONNECTIVITY

The DIVA8M G2 Master unit provides enhanced digital audio processing (DSP), a digital message player, a fully monitored fireman's microphone, amplifier monitoring with switchover to backups and loudspeaker line monitoring for 16 audio lines (8 lines A/B). It can process and route one PSS-G2, CD8-G2 or CD16-G2 microphone console or up to eight cascaded PSM8-V3 paging microphones, along with two 0dB audio inputs and one mic/line input into two different channels (music + voice) using configurable priorities. The DIVA8 system utilises two external amplifier channels with a maximum capacity of 1000 W each.

PRE-PROCESSING

All audio inputs feature contact and VOX activation and each input is fitted with volume controls and equalisers. Up to 45 minutes of digital messaging can be stored in the unit. These are stored as WAV files and uploaded directly from a PC into the DIVA8M G2. Up to two messages can be played simultaneously in different zones for phased evacuation.

INTERFACING

DIVA8M G2 has nine monitored alarm inputs which can be individually programmed for specific message/input routing to all or selected channels. Each DIVA8 system module has eight output zones with A/B wiring and each zone can be routed manually or automatically to one of the system's audio channels (music or voice). The number of zones can be extended up to 128 A/B zones with the addition of DIVA8S G2 Slave units (up to a maximum of 15 slave units). The music source can be selected directly from the front panel and switched into each zone separately and a rear-panel RS232 port allows third-party control and interfacing.



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REDUNDANCY

In case of Evacuation, the amplifier music channel can be used as a second alarm channel. Each DIVA8 system requires only one 2-channel amplifier (one channel for music, one for voice). The music amplifier will also act as a backup amplifier in case of voice amplifier failure. Each channel can handle up to 1000W audio power (at 100V).

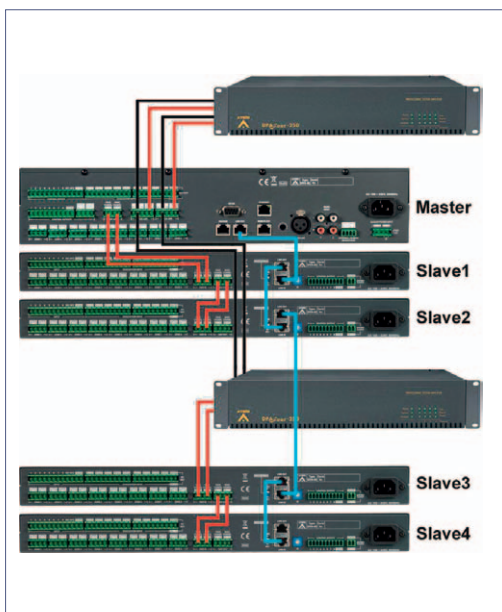
From the DIVA8M G2 front panel the user can manually route the fireman's microphone signal and three digital messages into selected zones, adjust the audio level and switch (ON/OFF) the music in each zone separately. In case of evacuation, the zone attenuators are automatically bypassed. One output contact per zone can be activated each time the zone is occupied with a source that has higher priority than the music (alarm or microphone paging).

SECURITY

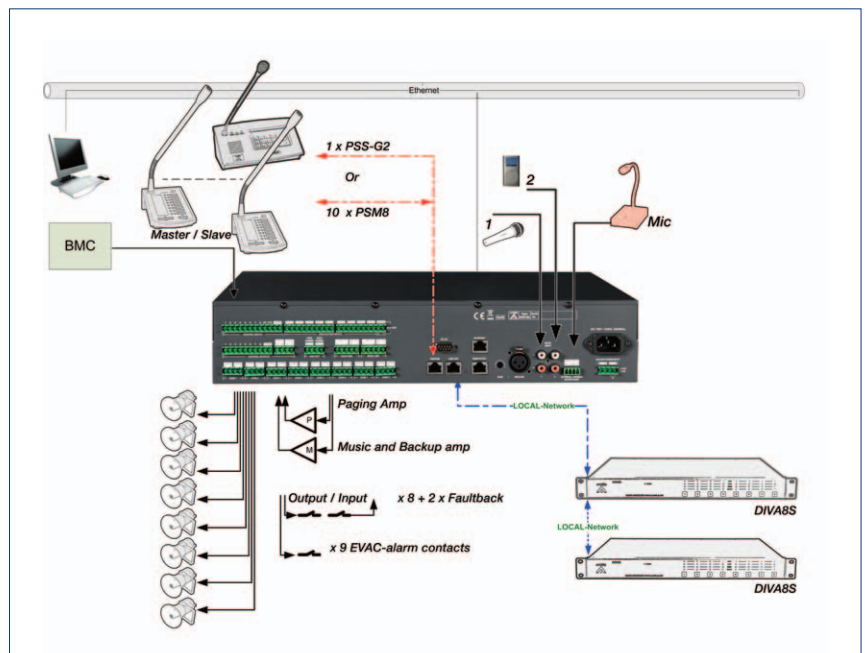
In accordance with EN54-16, ISO 7240-16 and BS5839/8, all DIVA8 system components and peripherals are monitored. This monitoring extends from the capsule of a paging station microphone to the end of a loudspeaker line. The external cables connected to the control inputs are monitored for short and open circuit and an internally-generated pilot tone is available for monitoring impedance on the loudspeaker lines. The master unit monitors the status of all the equipment in the system, reports status changes and stores the last 999 fault messages in the system. This log can be accessed on the master unit display or on a PC using the DIVA8 control software.

DIVA8 system units operate either on mains power or on a 24V battery power supply for emergency back-up, with automatic switchover. Both power supplies are monitored.

INTERCONNECTIONS



INSTALLATION NOTES





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CONTROLS AND INDICATORS

Front

- 3,5" full colour touch-screen LCD display
- Zone selection buttons
- EVAC-start
- Fireman's microphone
- Status indicators

Rear

- Voltage selector

INTERCONNECTIONS

Front

- Fireman microphone

Rear

- Mains input
- Battery backup input
- 8 EVAC inputs
- 9 control inputs
- 2 fault inputs
- 8 control outputs
- 1 remote Fireman's mic input
- 4 analogue line audio inputs
- Ethernet connection
- 8 zone 100 Volt outputs (A+B)
- 1 monitored paging console input

CERTIFICATIONS AND APPROVALS

REGION CERTIFICATIONS

REGION	CERTIFICATIONS	
Europe	CE	CE – 0359 (Intertek)
	Immunity	according to EN50103-4
	PAVA	EN54-16 certified 2012



PARTS INCLUDED

Quantities	Components
1	DIVA8M G2 Master unit
1	Fireman's microphone
1	Power cord
1	Set of connectors
1	Set of 19" rackmount brackets
1	DIVA8-system software

TECHNICAL SPECIFICATIONS

Electrical

Mains power supply

Voltage	115 or 230 VAC ±15%, 50/60 Hz
Power consumption	48 W

Battery power supply

Voltage	18 - 26 VDC
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Performance

Frequency response	-3 dB @ 20 Hz and 20 kHz
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Audio Line inputs 2 x

Connector	2x2 RCA (un-balanced)
Frequency response	-3 dB @ 20 Hz and 20 kHz

S/N	>76 dB (Line-level) >78 dB (Mic-level)
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THD	< 0,02% @ 1 kHz
Input range	770 mV (0 dBu to -60 DBU)
Input impedance	10 kohm

Fireman's microphone 1 x

Connector	5-pin locking-DIN
Frequency response	-3 dB @ 200 Hz and 10 kHz
S/N	>70 dBu
THD	< 1% @ 1 kHz
Signal	-40 to -30 dBu
Output impedance	10 kohm

Monitor loudspeaker

Frequency response	-3 dB @ 200 Hz and 10 kHz
S/N	>70 dBu
THD	< 5% @ 1 kHz @ 8ohm
Signal	16 dBu

Amplifier lines in 2 x 100 V

Max rated output power	1000 W (cont. at 40°C)
Frequency response	-3 dB @ 50 Hz and 18 kHz
Input level	16 dBu

Loudspeaker lines out 16 x

Rated load resistance	100 ohm (100 V)
Rated power	100 W (cont. at 40°C)

Mechanical

Dimensions (H x W x D)

for 19" rack use, with brackets	88 x 483 x 338 mm
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Weight

DIVA8M G2	7.5 kg (16,5 lb)
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Mounting	19"-rackmount
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Colour	RAL7016
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Environmental

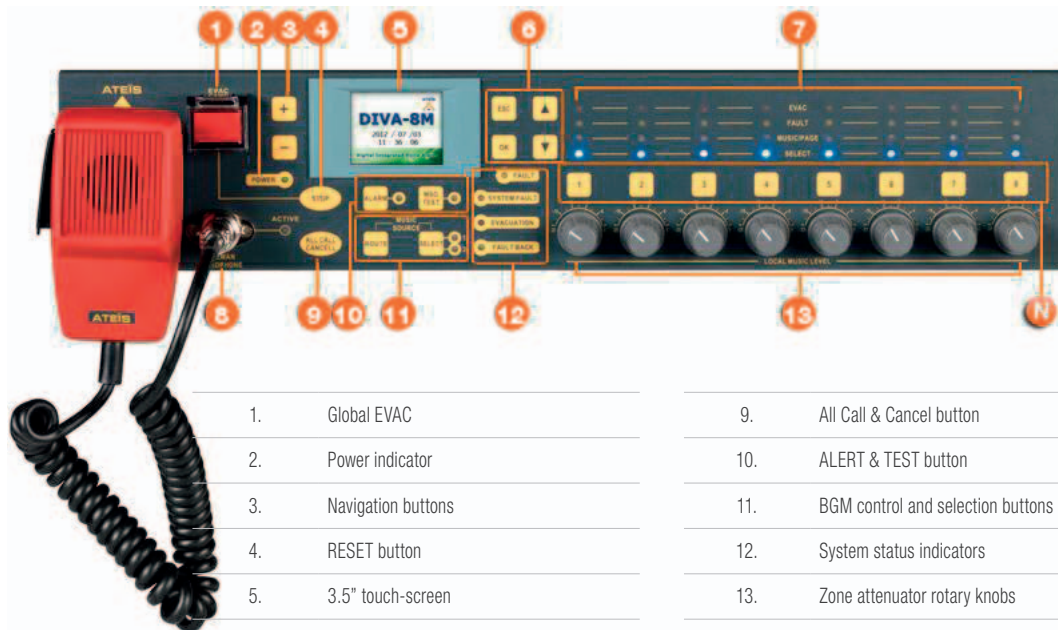
Operating temperature	-5 °C to +55 °C (+23 °F to +131 °F)
Storage temperature	-40 °C to +70 °C (-40 °F to +158 °F)
Relative humidity	15% to 90%

Ordering information

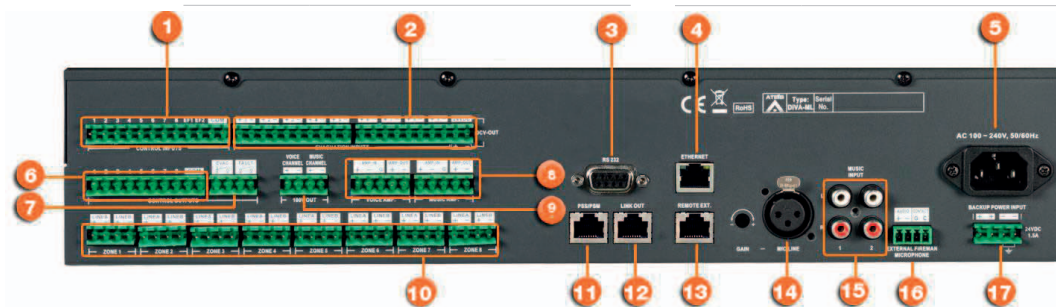
DIVA8M G2 Master unit

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|---------------------------------|---|
| 1. Global EVAC | 9. All Call & Cancel button |
| 2. Power indicator | 10. ALERT & TEST button |
| 3. Navigation buttons | 11. BGM control and selection buttons |
| 4. RESET button | 12. System status indicators |
| 5. 3.5" touch-screen | 13. Zone attenuator rotary knobs |
| 6. Navigation buttons | 14. Zone selection buttons |
| 7. Zone status indicators | 15. Monitor loudspeaker (behind fireman's mic)
(Audible warning) |
| 8. Fireman's microphone on hook | |



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|--------------------------|--------------------------------------|
| 1. Control inputs | 10. Speaker zone outputs (A+B lines) |
| 2. Evacuation inputs | 11. Paging console input |
| 3. RS232 connector | 12. Master - Slave link |
| 4. Ethernet connector | 13. Remote Ext. connector |
| 5. Power MAINS | 14. Mic/Line input |
| 6. Logic outputs | 15. Music inputs |
| 7. EVAC & FAULT contacts | 16. External fireman's mic input |
| 8. Amplifier I/O | 17. 24 VDC backup supply input |
| 9. 100 V signal links | |