## DIVA8MG2

### COMPACT PAVA SYSTEM - MASTER UNIT - SWITCH MODE

#### MAIN CHARACTERISTICS

- 8-zone system controller with individual volume controls per channel
- 5 audio inputs (2 x line, 1 x MIC/line, 1 x PSS or PSM, 1 x Fireman Mic)
- 1000 Watts maximum load / 100V line outputs per channel amplifier
- Enhanced loudspeaker line surveillance for A/B zoned installations
- 9 monitored logic control inputs, 8 nonmonitored logic control inputs
- Ethernet interface for configuration, control, diagnostics and logging
- Digital storage for up to 45 minutes of prerecorded messaging
- PEQ: 3 bands on inputs, 7 bands on the two outputs channels
- Modbus, notifier, Vox@Net Protocol interface via RS232
- Full monitoring of PSS and PSM paging consoles
- 2 channel audio distribution for Paging and BGM
- Incident data record with up to 2047 entries
- · Combined back-up amplifier function.
- Programmable Message Scheduler Events
- 1 Fault relays & 1 EVAC relays outputs
- Low and high pass filtering on inputs
- Programmable of 21 priority levels
- 2U standard 19" rack mounting
- 1 Fault & 1 Evac relays outputs
- Programmable of 4 user levels
- 2" full color TFT screen
- Export the incident log
- 8 Logic relay contacts
- EN54-16 certified

DIVA8G2 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.

DIVA8G2 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.



#### **CONNECTIVITY:**

The DIVA8G2 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 ten 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 DIVA8G2 system utilizes two external amplifier channels with a maximum capacity of 1000 W each. PRE-PROCESSING:

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All audio inputs feature contact and VOX activation and each input is fitted with volume controls and equalizers. 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 DIVA8MG2. Up to two messages can be played simultaneously in different zones for phased evacuation.

#### **INTERFACING:**

DIVA8MG2 has nine monitored alarm inputs which can be individually programmed for specific message/input routing to all or selected channels. Each DIVA8G2 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 DIVA8SG2 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, also a RS232 port on the rear panel allows third-party control and interfacing.

#### **REDUNDANCY:**

In case of Evacuation, the amplifier music channel can be used as a second alarm channel. Each DIVA8G2 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).

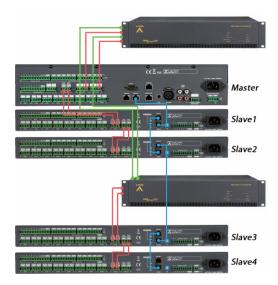
Users shall manually route the Fireman microphone signal, three digital messages into selected zones, adjust the audio level and switch (ON/OFF) the music in each zones separately from the front-panel of DIVA8MG2 (Master unit). In case of evacuation, the zone attenuator are auto-matically bypassed. One 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 DIVA8G2 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 DIVA8G2 control software.

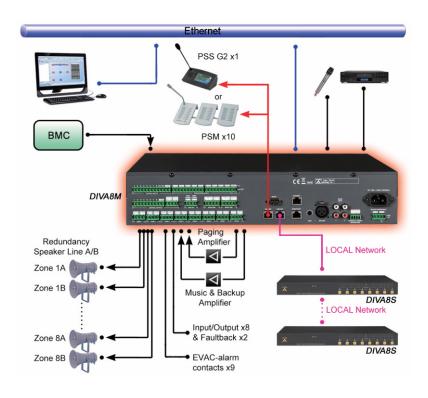
DIVA8G2 system units operate either on 110VAC or 230VAC mains power supply or on a 24V battery power supply for emergency back-up, with automatic switchover. Both power supplies are monitored.

#### INTERCONNECTIONS:



DIVA8MG2 Master unit and DIVA8SG2 Slave unit with 4 amplifier channels

#### **INSTALLATION NOTES**





# DIVA8MG2

## COMPACT PAVA SYSTEM - MASTER UNIT - SWITCH MODE

### **CONTROLS AND INDICATORS**

| Front   |
|---|
| · 2" full color TFT screen                              |
| · Zone selection / Music control / EVAC / Reset buttons |
| · Fireman microphone                                    |
| · VACIE indicators                                      |
| · Zone attenuator knobs                                 |
| · Status indicators (Power / G. Fault / System Fault /  |
| EVAC / Bypass Mode)                                     |
| Rear  |
| · Voltage selector                                      |

#### INTERCONNECTIONS

| INTERCONNECTIO                      | NO         |
|-------------------------------------|------------|
| Front                               |            |
| Fireman microphone                  |            |
| Rear                                |            |
| AC power socket                     |            |
| 24VDC backup power input            |            |
| 9 EVAC inputs                       |            |
| 8 control inputs                    |            |
| 2 state inputs(open contact & close | e contact) |
| 8 control outputs                   |            |
| Evac & Fault contacts               |            |
| 1 remote Fireman's mic input        |            |
| Music / Line Input                  |            |
| 4 analogue line audio inputs        |            |
| Ethernet connection                 |            |
| 8 zone 100 Volt outputs (A+B)       |            |
| RS232 Connector                     |            |
| 1 monitored paging console input    |            |

# **CERTIFICATIONS AND APPROVALS**

**REGIONAL CERTIFICATIONS** 

| Europe | Voice Alarm | EN54-16 certified 2012   |
|--------|-------------|--------------------------|
|        |             | CE - 0359                |
|        |             | according to EN50130 - 4 |

### **PARTS INCLUDED**

| Quantities | Components                          |
|------------|-------------------------------------|
| 1          | DIVA8MG2 Master unit                |
| 1          | Fireman microphone                  |
| 1          | Power cord (type depends on region) |
| 1          | Set of connectors                   |
| 1          | Set of 19" rack mount brackets      |
| 1          | DIVA8G2-system software             |
| 1          | LAN Cable                           |

## **TECHNICAL SPECIFICATIONS**

| Electrical              |                               |
|-------------------------|-------------------------------|
| Mains power supply      |                               |
| Voltage                 | 230/115 VAC ±15%, 50/60 Hz    |
| Power consumption       | 48 W                          |
| Battery power supply    |                               |
| Voltage                 | 18 - 30 VDC                   |
| Performance Performance |                               |
| Frequency response      | -3dB @ 20 Hz and 20 kHz       |
| Audio Line inputs       | (Optional audio input card)   |
| Connector               | 2x2 RCA (un-balanced)         |
| Frequency response      | -3dB @ 20 Hz and 20 kHz       |
| SNR                     | > 76 dB (Line-level)          |
|                         | > 78 dB (Mic-level)           |
| THD                     | < 0.02% @ 1 kHz               |
| Input sensitivity       | 770 mV (0 dBu $\sim$ -60 dBU) |
|                         | 10 kohm                       |

| Fireman microphone |                         |  |
|--------------------|-------------------------|--|
| Connector          | 5-pin locking-DIN       |  |
| Frequency response | -3dB @ 20 Hz and 20 kHz |  |
| SNR                | > 70 dBu                |  |
| THD                | < 1% @ 1 kHz @ 80hm     |  |
| Signal             | -40 to -30 dBu          |  |
| Output impedance   | 10 kohm                 |  |

| Monitor loudspeaker    |                              |
|------------------------|------------------------------|
| Frequency response     | -3dB @ 200 Hz and 20 kHz     |
| SNR                    | > 70 dB                      |
| THD                    | < 5% @ 1 kHz @8ohm           |
| Signal                 | 16 dBu                       |
|                        |                              |
| Amplifier lines in     | 2 x 100V                     |
| Max rated output powe  | r 1000 W (cont. at 40°C)     |
| Frequency response     | -3 dB @ 50 Hz and 18 kHz     |
| Input level            | 16 dBu                       |
|                        |                              |
| Speaker lines out      | 16 (8 zones x 2 A/B)         |
| Rated power            | 1000 W (cont. at 40°C)       |
|                        |                              |
| Mechanical             |                              |
| Dimensions (With 19" r | ack mount brackets)          |
| (H x W x D)            | 2RU, 88 x 483 x 338 mm       |
|                        | (3-1/2" x 19" x 13-3/10")    |
| Weight                 | 7.5 kg (16.5lbs)             |
| Mounting               | 19"-rack mount               |
| Color                  | RAL7016                      |
|                        |                              |
| Environmental          |                              |
| Operating temperature  | -5°C ~ 55°C (23°F ~ 131°F)   |
| Storage temperature    | -40°C ~ 70°C (-40°F ~ 158°F) |
| Relative humidity      | 15% to 90%                   |
| Air pressure           | 600 to 1100 h Pa             |
|                        |                              |

