

User Manual

# PUBLIC ADDRESS & GENERAL ALARM SYSTEM

SPA-V2

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# 1 Introduction

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## 1.1 About this Document

The scope of this document is to provide relevant information on how to use the VINGTOR SPA-V2 Public Address & General Alarm System.

The information in this document is aimed at System Administrators, System Installers and End Users.

## 1.2 Publication Log

Rev.	Date	Author	Comments
1.0	2008-03-05	TH/JF	Published
1.11	2008-04-20	JF	Revised
2.0	2011-01-28	HKL	Revised & new profile
2.1	2011-06-27	HKL	Revised text, panel figures
2.2	2016-09-01	SEN	Revised names

## 1.3 Related Documents

Doc. no.	Documentation
A100K10370	SPA-V2 Configuration & Installation Manual
A100K10369	SPA-V2 System Manual
	Project documents, drawings and SPA schematics
	Outline drawings in AutoCAD
	Amplifier and Entertainment manuals

## 1.4 Rules and Regulations

The SPA-V2 Public Address and General Alarm System is designed to meet the requirements in accordance with SOLAS:

- Chapter III, part B, regulation 6.4 and 6.5
- MSC.48(66) – International Life-Saving Appliance (LSA) Code
- MSC/Circ.808 – Public Address for passenger vessels
- MSC A.830(19) – Code on Alarms and Indicators, 1995

The system also meets additional requirements from the following class societies:

DNV, GL, BV, LR, RS, CCS, RINA, and ABS.

The SPA-V2 system and its components have been tested according to the following regulations:

- **IEC 60533: Second edition, 1999**  
“Electrical and electronic installation in ships - Electromagnetic compatibility”.
- **IEC 60945: Fourth edition, 2002**  
“Maritime navigation and radio communication equipment and systems - General requirements - Methods of testing and required test results”.
- **IACS E10: Corr.1 July 2003**  
“Unified environmental test specification - Testing procedure for electric control and monitoring, safety and protection, onboard computer based systems and peripherals, loading instruments, internal communication and other electrical equipment as considered appropriate”.

## 2 User Instructions

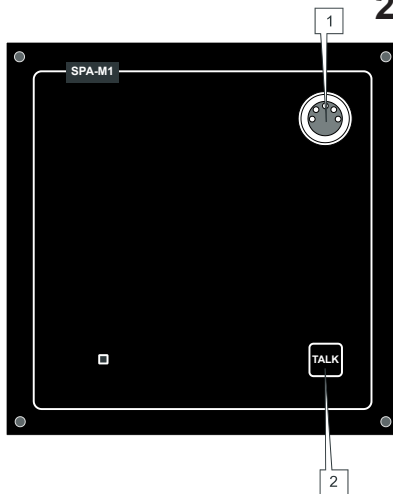
### 2.1 General Description

This section contains descriptions on how to use the SPA Public Address System with all its equipment. It is recommended to read this section thoroughly before using the system for the first time. Some equipment models, especially entertainment units, can be changed from one project to another and separate user manuals will be delivered for these models.

If a higher priority panel/source is activated, the PA panels with lower priority will cease to function as this will cut the 24 VDC power supply to the panels.

### 2.2 Make an ALL CALL with SPA-M1-V2 / SPA-M1-D

These PA panels are designed to broadcast an All Call message. Alternately, they can be used as hailers or local PA panels. SPA-M1-V2 panels are used in a single system while SPA-M1-D panels are used in a dual system. Single or dual panel systems are configured according to project specifications at delivery, but usage is the same for both types of panels. Operation will also activate a chime unit if installed. Ongoing alarms are muted when Emergency messages are broadcasted.



1. Connector for handheld or gooseneck microphone.
2. Push-button PTT Switch for gooseneck microphone.

#### Operation with gooseneck microphone MB-30G

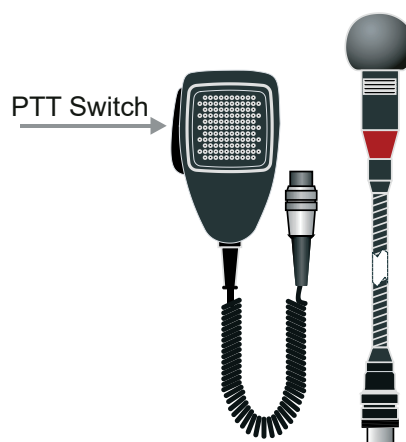
1. Press the TALK button.
2. Speak close to and clearly into the microphone to broadcast the message.

#### Operation with handheld microphone ETC-1-TB

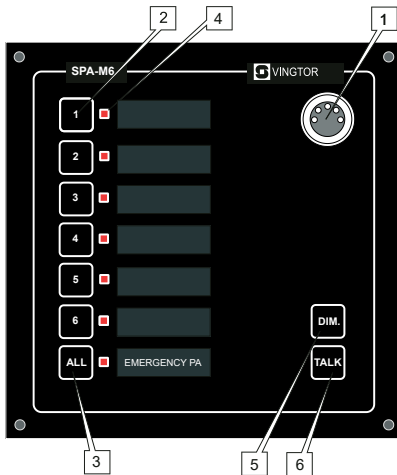
1. Press the PTT Switch on the microphone.
2. Speak close to and clearly into the microphone to broadcast the message.

#### Terminating the function

When the PTT Switch / TALK button is released, the PA system will return to standby or alarm mode. If an alarm has been muted, it is automatically turned on again.



## 2.3 Broadcast a PA message with SPA-M6-V2 / SPA-M6-D



1. Connector for handheld or gooseneck microphone.
2. 1-6 zone selection buttons.
3. Push-button for all 6 zones.
4. Indication light (red LED) for activated zone.
5. Button for dimming indication light - also dims SPA-AC6 when attached.
6. Push-button PTT Switch for gooseneck microphone.

This PA panel can operate all six public address zones.

SPA-M6-V2 covers single systems while SPA-M6-D covers dual systems. Single or dual systems are connected according to project specifications at delivery. Usage is similar for both panels. Replaceable text can be used for each push button. For systems with emergency requirements, use the ALL button.

Operation will activate the chime unit if installed. A potential-free contact will be activated and mute any ongoing alarm message when using the Emergency PA (ALL) button.

- Press the desired zone button and the Public Address call will be set up.
  - Indicated by a steady red LED.

### Emergency operation (SPA-AC6 required)

- Press the Emergency PA (ALL) button and the Public Address emergency call is set up.
  - Indicated by a steady red LED. Alarm or entertainment message will be muted.

### Operation with gooseneck microphone MB-30G

1. Select the zone.
2. Press and hold the TALK button.
3. Speak close to and clearly into the microphone to broadcast the message.

### Operation with handheld microphone ETC-1-TB

1. Select the zone.
2. Press and hold the PTT Switch.
3. Speak close to and clearly into the microphone to broadcast the message.

### Terminating the operation

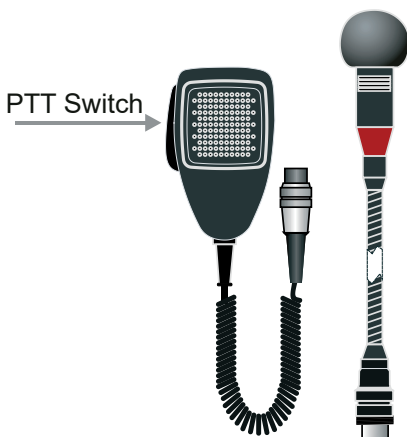
- Release the PTT Switch / TALK button to terminate the operation. If an alarm has been muted, it is automatically turned on again.

### Adjusting the push button light intensity

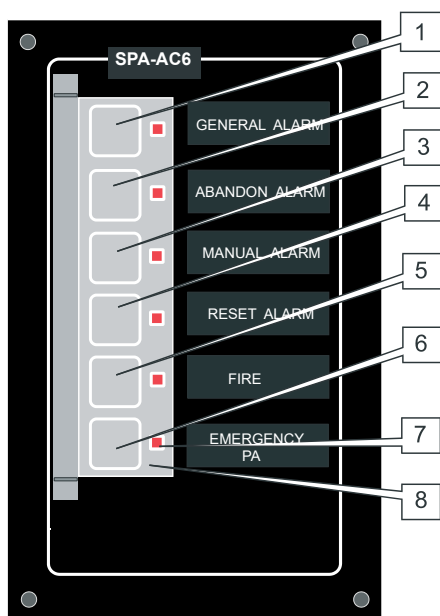
Intensity of light in push buttons can be adjusted by pressing the DIM button. The intensity increases in 5 increments per button press (or hold) and when maximum intensity is reached, the next press will reverse direction and decrease the intensity.

### To adjust the light intensity:

1. Press the DIM button once for minimum intensity.
2. Press the DIM button once more to return to maximum intensity.



## 2.4 Alarm Start with SPA-AC6 and SPA-AC6-D



1. General Alarm push-button.
2. Abandon Alarm push-button.
3. Manual Alarm push-button.
4. MOB/RESET
5. Fire
6. Emergency PA push-button
7. Indication light (red LED) for activated alarm or function.
8. Protective cover

This Alarm panel can start three alarms and Emergency PA.

① The alarm generator may contain custom alarm configurations according to project specifications.

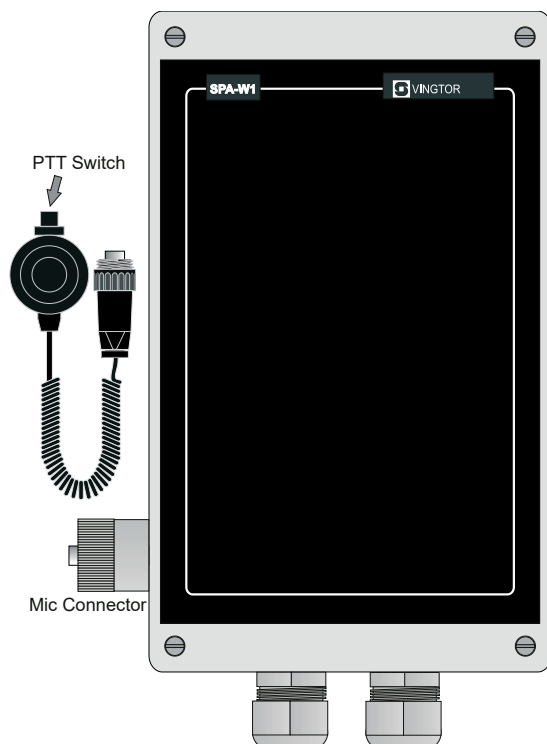
SPA-AC6 covers a single system while SPA-AC6-D covers a dual system. Single or dual systems are configured according to project specifications at delivery. The panel is equipped with a protective cover against accidental use.

Normally the alarm panel is installed close to the PA panel.

To start the alarm:

- Open the protective cover.
- Press the button labeled **GENERAL ALARM** to activate the General alarm.
  - Indicated by a steady red LED.
- Press the button labeled **ABANDON ALARM** to activate the Abandon alarm.
  - Indicated by a steady red LED.
- Press the button labeled **MANUAL ALARM** to activate the Manual alarm.
  - Indicated by a steady red LED.
- Press the button labeled **RESET ALARM** to turn off the alarm.
- Press the button labeled **EMERGENCY PA** to activate the Emergency PA message.
  - Hold the button when speaking into the microphone of the associated microphone panel. Releasing the Emergency PA button will automatically turn any active alarm back on again.

## 2.5 Broadcast a PA message with SPA-W1-V2 & SPA-W1-D



This PA panel is intended for EMERGENCY use only and is meant to cover ALL zones. Alternately, they can be used as local PA panels.

Operation will also activate the chime if such a functionality is installed.

Any ongoing alarm message will be muted.

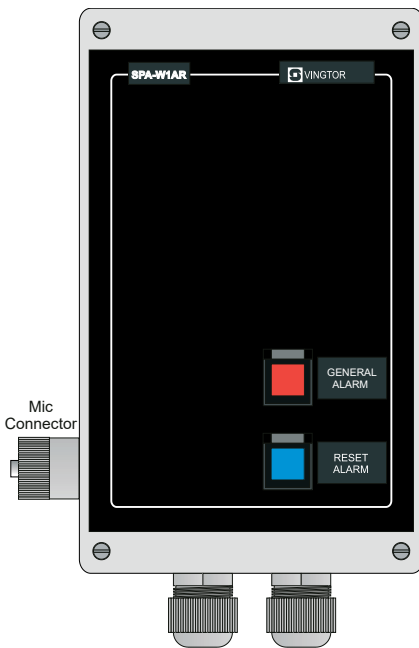
To broadcast a PA message:

1. Press the PTT Switch on the microphone.
2. Speak close to and clearly into the microphone to broadcast the message.
  - Ongoing alarm messages will be muted.

When the PTT Switch is released, the PA system will return to standby or alarm mode. Any alarm which has been muted during the message will automatically be broadcasted when the message is finished.

## 2.6 Alarm Start / PA message with SPA-W1AR-V2 &

## SPA-W1AR-D



This unit is a combined panel for GENERAL ALARM and EMERGENCY PA message, meaning that it covers ALL zones for PA messages and GA.

Operation will also activate the chime unit if it is installed.

Any ongoing alarm message will be muted. For normal operation, see section 2.5.

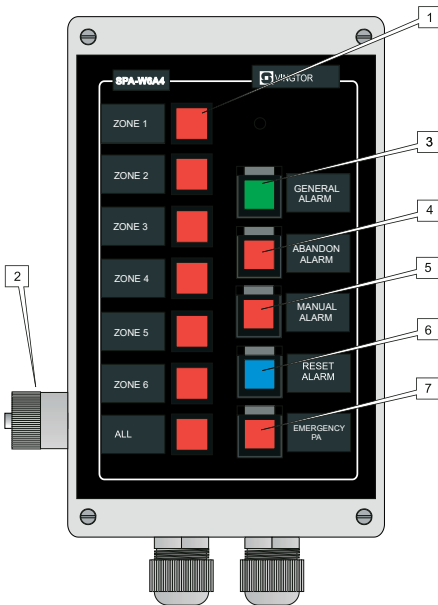
### Alarm Start or Emergency PA

1. Open the protective cover.
2. Press the button labeled GENERAL ALARM to activate GA.
3. Press the PTT Switch on the microphone.
4. Speak close to and clearly into the microphone to broadcast the message.
  - Alarm message will be muted

When the PTT Switch is released, the PA system will return to alarm distribution mode and any alarm which has been muted during the emergency message will be turned on again.

- Press RESET to turn off the alarm

## 2.7 Alarm Start / PA message with SPA-W6A4 & SPA-W6A4-D



This unit is a combined alarm and PA panel.

The PA part can operate all the six public address zones.

The unit can be used as a PA panel or Alarm or in combination.

The Alarm part can start three alarms, including GENERAL ALARM and EMERGENCY PA.

The panel is equipped with a protective cover for the alarm push buttons.

The text labels can be replaced for each push button.

Operation will also activate the chime unit if it is installed. When using the Emergency PA button, any ongoing alarm will be muted.

### Alarm Priorities

1. GENERAL ALARM
2. ABANDON ALARM
3. MANUAL ALARM

### Alarm Start or Emergency PA

Open the protective cover for the selected alarm and select one of the following alarms or functions:

- Press the button labeled **GENERAL ALARM** to activate GA.
  - Indicated by a steady green LED.
- Press the button labeled **ABANDON ALARM** to activate the Abandon alarm.
  - Indicated by a steady red LED.
- Press the button labeled **MANUAL ALARM** to activate the Manual alarm.

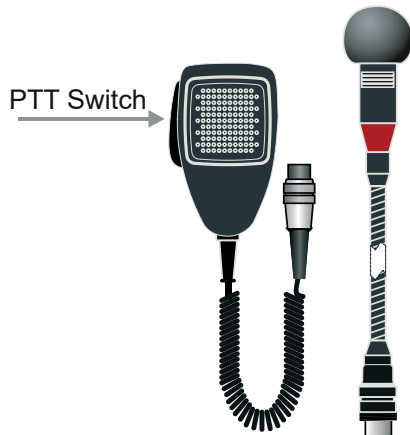
1. 1-6 zone selection buttons.
2. Connector for handheld or gooseneck microphone.
3. General Alarm push-button.
4. Abandon Alarm push-button.
5. Manual Alarm push-button.
6. Reset Alarm push-button.
7. Emergency PA push-button.



- Indicated by a steady red LED.

- Press the button labeled **EMERGENCY PA** to activate the Emergency PA message.

① *This function overrides priorities in the system and should be used with caution.*



### Microphone

1. Press the PTT Switch.
  - Speak close to and clearly into the microphone to broadcast the message. Alarm message will be muted.
2. When the PTT Switch is released, the PA system will return to alarm mode, and any alarm which has been muted during the emergency message will be turned on again. Otherwise it will go back to standby.
3. Press RESET to turn off the alarm.

### PA part only

- Press the desired ZONE buttons
  - The Public Address call is set up indicated by steady red LEDs.

### Emergency operation

1. Press the **EMERGENCY PA** button
  - The Public Address emergency call is set up indicated by a steady red LED. The alarm message will be muted.
2. Press the PTT Switch.
  - Speak close to and clearly into the microphone to broadcast the message.

To end the Emergency function:

Release the PTT Switch and the PA system will return to standby or alarm mode.

## 2.8 Alarm Start from the Fire Alarm Exchange

(with alarm generator installed)

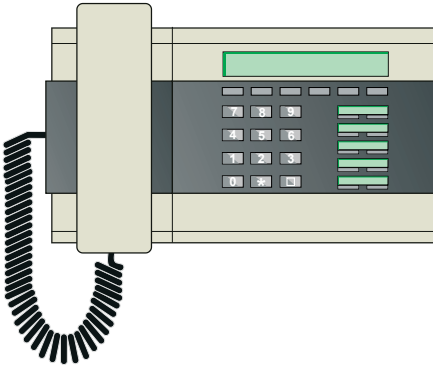


The SPA alarm generator is activated by a switch from the Fire Alarm Exchange. Alarm distribution is set according to project specifications at delivery. This unit is normally not part of the Zenitel delivery.

- The Fire Alarm from the fire exchange will be distributed through the SPA system.
  - Any PA message units will override the alarm to broadcast the message.
- Press the PTT Switch for panels with hand microphones or the TALK button for panels with gooseneck microphones.
  - Speak clearly into the microphone to broadcast the message. The Alarm message will be muted.

When the PTT Switch or TALK button is released, the PA system will return to alarm mode and any alarm which has been muted during the emergency message will be turned on again.

## 2.9 Broadcast a PA message from a PABX telephone

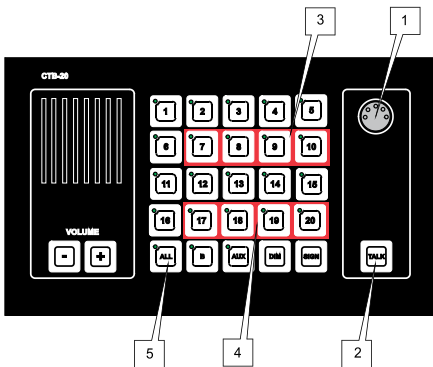


The zones that should receive messages are set according to project specifications at delivery. The telephone model used depends on the delivered model or customer requirements.

Refer to the user manual for the telephone if necessary.

1. Dial the PA access number and use the telephone as normal.
2. Speak clearly into the telephone to broadcast the message.
3. Replace the handset and the PA system will return to standby or alarm mode,
  - any alarm which has been muted during the emergency message will be turned on again.

## 2.10 Broadcast a PA message from CTB-10/CTB-20 Talk-Back panels



The four last line push buttons on the operation panels can be set to access 1 to 4 public address zones of this PA system. Operation will also activate the chime unit if it is installed. Any activated alarm is muted when using the **ALL** button for Emergency operation.

- Press the desired **LINE** button
  - The Public Address call is set up indicated by a steady green LED.

1. Connector for handheld or gooseneck microphone.
2. Talk button when using gooseneck microphone
3. Push-buttons 7 – 10 on CTB-10 panel for activating PA zones 1 – 4
4. Push-buttons 17 – 20 on CTB-20 panel for activating PA zones 1 – 4
5. Push-button for all zones

### Emergency operation

- Press the **ALL** button,
  - The Public Address call is set up indicated by a steady green LED.
  - The alarm message will be muted.
- Pressing the **TALK** button will mute all alarm and PA broadcasts

### Operation with gooseneck microphone MB-30G

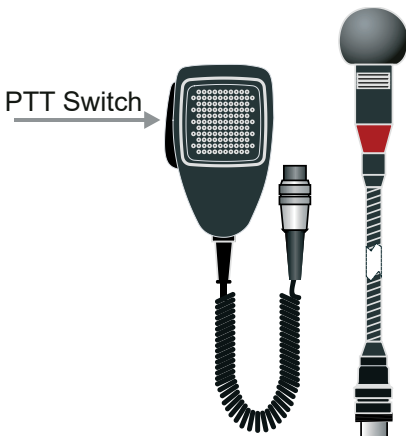
1. Press the **TALK** button.
2. Speak close to and clearly into the microphone to broadcast the message.
3. Release the **TALK** button to re-activate the alarm.

### Operation with handheld microphone ETC-1-TB

1. Press the PTT Switch.
2. Speak close to and clearly into the microphone to broadcast the message.
3. Release the PTT Switch to re-activate any alarm which has been muted during the message.

### To terminate the function:

- Press the **LINE** buttons or the **ALL** button once more to terminate the Public Address operation.



## 2.11 Volume Control - 4-Wire Override, VM15-R & VM50-R



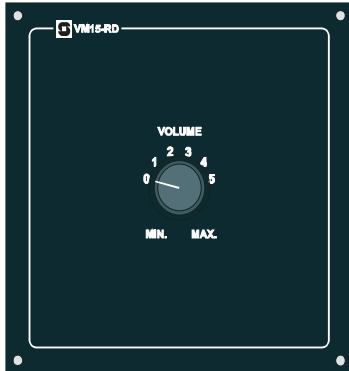
This is a Volume Control with 24V override for PA message in a single system.

Entertainment loudspeaker zones covered by the volume control are set according to project specification.

- Turn the VOLUME knob clockwise or counterclockwise for higher or lower sound level

Any PA message will override volume control and the ongoing entertainment audio.

## 2.12 Dual Volume Control - 4-Wire Override, VM15-RD & VM50-RD



This is a Volume Control with 24V override for PA message in a dual system.

Entertainment loudspeaker zones covered by the volume control are set according to project specification.

- Turn the VOLUME knob clockwise or counterclockwise for higher or lower sound level

Any PA message will override volume control and the ongoing entertainment audio.

## 2.13 Dual Volume Control - 4-Wire, Relay Failsafe, VM15-RDF & VM50-RDF



This is a Volume Control with 24V override and relay failsafe for PA messages in a dual system.

Entertainment loudspeaker zones covered by the volume control are set according to project specification.

- Turn the VOLUME knob clockwise or counterclockwise for higher or lower sound level

Any PA message will override volume control and the ongoing entertainment audio.



**The WEEE Directive does not legislate that Zenitel, as a 'producer', shall collect 'end of life' WEEE.**

**This 'end of life' WEEE should be recycled appropriately by the owner who should use proper treatment and recycling measures. It should not be disposed to landfill.**

Many electrical items that we throw away can be repaired or recycled. Recycling items helps to save our natural finite resources and also reduces the environmental and health risks associated with sending electrical goods to landfill.



Under the WEEE Regulations, all new electrical goods should now be marked with the crossed-out wheeled bin symbol shown.

Goods are marked with this symbol to show that they were produced after 13th August 2005, and should be disposed of separately from normal household waste so that they can be recycled.