

# VPA-2

Disabled Persons Response Alarm.



## User Operation Guide

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Ventcroft Ltd  
VPA-2 Disabled Person Response (WC) User Guide

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# Table of Contents

1.0 Description.....	4
2.0 Operating Modes.....	5
2.1 Normal Stand-By Mode – Mains On (Quiescent).....	5
2.2 Battery Back Up Mode - Mains off. ....	5
2.3 Battery Saver Power Off. ....	5
3.0 Indicators and Sounders.....	6
3.1 ECU Green Power LED.....	6
3.2 ECU Amber Fault LED.....	6
3.3 ECU Red Call LED.....	6
3.4 ECU Internal Buzzer.....	6
3.5 Field Warning Devices.....	6
4.0 Operation.....	7
4.1 Generate a Call Alarm Using a Ceiling Pull Cord Device.....	7
4.2 Mute a Call Alarm at the ECU.....	7
4.3 Reset a Call Alarm using a “Remote Reset Device”.....	7
4.4 Reset a Call Alarm using ECU.....	7
4.5 System Test.....	7
4.6 To Generate an “Attendant Distress Call” from “stand by mode”.....	8
4.7 To Generate an “Attendant Distress Call” while a “Call Alarm” is in progress.....	8
4.8 Reset an “Attendant Distress Call Alarm” using a “Remote Master Reset Device”.....	8
4.9 Reset a “Call Alarm” using a “Remote Master Reset Device”.....	8
5.0 Routine Testing and Maintenance.....	9
5.1 Routine Testing.....	9
5.2 Routine Battery Maintenance.....	9

## 1.0 Description

The VPA-2 disabled persons response alarm has been designed for applications such as disabled persons dwellings, hospitals, hotels and is ideal for disabled persons toilets. The requirements of BS8300 have been taken into consideration when designing the VPA-2.

The VPA-2 system consists of an Electronic control unit (ECU) which is connected to all of the field call, reset and indicator devices.

Field devices consist of three types which provide the Electronic Control Unit with the necessary Input and output signals to allow the system to function.

“Call Devices” can either be ceiling mounted pull cord devices or wall mounted push button devices, they are used to generate an alarm activation by a person in distress or requiring attention from a carer. When a call device is activated the system will generate an alarm, an indicator LED mounted on the Device will illuminate. “Attendant Distress Call Devices” are wall mounted push button devices which can also be installed to enhance a system and when activated they produce a more urgent alarm to summon other carers.

“Reset Devices” which are generally wall mounted and consist of push button devices which are pressed to cancel an alarm activation. Reset devices with a key enable can be installed for key holder only reset.

“Warning Devices” are generally wall mounted devices which during an alarm activation will alert carers / staff of a person requiring attention. Warning devices typically have visual and audible element within the same housing, devices with only audible or visual elements may also be fitted to a system.

The VPA-2 Electronic Control Unit (ECU) is powered by the mains supply, an optional battery back up can be installed which allows the VPA-2 system to function during a power outage.

The Electronics Control Unit (ECU) has a built in buzzer and three front mounted LED's which are used to indicate the status of the system. A green LED indicates the status of the mains power supply, an amber LED will display the fault status field devices wiring and power supply, and a red LED indicates the presence of an alarm activation.

The VPA-2 system is very simple to use and operate, all the features and operation will be discussed in further detail within this user guide.

## 2.0 Operating Modes

### 2.1 Normal Stand-By Mode – Mains On (Quiescent)

In Normal operation the VPA-2 system will be in stand-by waiting to receive a “Call” activation

The Green power LED will be illuminated indicating the Mains Supply is present and the ECU (Electronic Control Unit) is in stand-by.

### 2.2 Battery Back Up Mode - Mains off.

If a battery back up unit is fitted, should the mains fail the back-up battery will allow the VPA-2 system to continue to operate.

During Battery back Up Mode as in Stand-by mode the ECU is waiting to receive a call.

The Green Power LED will flash once every 5 seconds, the Amber Fault LED will flash once every 5 seconds Along with the power LED. The Internal buzzer will bleep once every 5 seconds.

### 2.3 Battery Saver Power Off.

If the VPA-2 System operates from the battery back up for a significant time it may flatten the battery. The ECU will automatically switch of the system into battery saver mode once the battery become flat. When operating in battery saver mode the VPA-2 can not receive a call.

The Green Power LED will flash once every 20 seconds, the Amber Fault LED will flash once every 5 seconds Along with the power LED. The Internal buzzer will bleep once every 20 seconds.

## 3.0 Indicators and Sounders

### 3.1 ECU Green Power LED

The Green Power LED shows the status of the VPA-2 power supply.

LED Illuminated	- Mains Supply Present
LED flashes once every 5 seconds	- Mains supply off and operating on battery backup
LED Flashers once every 20 seconds	- Battery Save mode, battery flattened.
LED Off	- System Completely Dead.

### 3.2 ECU Amber Fault LED

The amber Fault LED illuminates to indicate the presence of a fault conditions.

LED Off	- System Normal.
LED Illuminated	- System Wiring Fault.
LED flashing once per second.	- System Wiring Fault – Short circuit.
LED flashes once every 5 seconds	- Mains supply off and operating on battery backup
LED Flashers once every 20 seconds	- Battery Save mode, battery flattened.

### 3.3 ECU Red Call LED

The Red “Call” LED indicates the status of any “Call” Alarm activations present on the VPA-2 system.

LED Off	- No Call Alarm Present
LED flashing once per second.	- Standard “Call Alarm” Activation Present.
LED flashes Twice per second	- “Attendant Distress Call” present

### 3.4 ECU Internal Buzzer

Buzzer Off	- No Call Alarm Present
Buzzer Sounding Once per second.	- Standard “Call Alarm” Activation Present.
Buzzer Sounding Twice per second	- “Attendant Distress Call” present
Buzzer Sounding once every 5 seconds	- Mains supply off and operating on battery backup
Buzzer Sounding once every 20 seconds	- Battery Save mode, battery flattened.

### 3.5 Field Warning Devices

Indicators / Sounders Off	- No Call Alarm Present
Indicators / Sounders activated once per second.	- Standard “Call Alarm” Activation Present.
Indicators / Sounders activated Twice per second	- “Attendant Distress Call” present

## 4.0 Operation

The VPA-2 system is very simple to use and operate. This section details how it would be used in the normal daily operation, how to generate a call, how to reset a call, how to mute a call.

### 4.1 Generate a Call Alarm Using a Ceiling Pull Cord Device.

- 1, locate a ceiling pull cord device
- 2, Pull on the cord using one of the activation aid handles.
- 3, The Indicator Mounted on the Call Device will illuminate,  
The system visual and audible Warning Devices will be activated and sound and flash once per second,  
The red Call LED and internal Buzzer will be activated.

### 4.2 Mute a Call Alarm at the ECU

- 1, Locate the VAP-2 Electronic Control Unit (ECU)
- 2, Briefly press the Mute / Reset button, for around a quarter of a second.
- 3, The ECU internal buzzer will be muted.  
The ECU Red Call LED will continue to flash  
The Field audible and Visual Warning Devices will continue to sound and flash in alarm.
- 4, The ECU internal Buzzer will continue to briefly beep once every 10 seconds, until the alarm is reset.

### 4.3 Reset a Call Alarm using a “Remote Reset Device”

- 1, Locate a “Remote Reset Device”
- 2, Press the Reset Button for around 1 second.
- 3, The Call Alarm is reset,  
All Field devices are silenced,
- 4, The field warning devices and the ECU buzzer will beep twice.

### 4.4 Reset a Call Alarm using ECU

- 1, Locate the Electronic Control Unit. (ECU).
- 2, Press the Reset Button briefly, for around a quarter of a second.
- 3, The Call Alarm is reset,  
All Field devices are silenced,
- 4, The field warning devices and the ECU buzzer will beep twice.

### 4.5 System Test

- 1, Locate the Electronic Control Unit. (ECU).
- 2, Press and hold “Reset / Mute” Button for around 2 seconds.
- 3, The Electronic Control Unit will begin the self test sequence.
- 4, The field warning devices and the ECU buzzer will beep twice.

#### **4.6 To Generate an “Attendant Distress Call” from “stand by mode”**

- 1, Locate a push button “Attendant Distress Call” device.
- 2, Briefly press the button for around half a second.
- 3, The systems visual and audible Warning Devices will be activated and will sound and flash twice per second.  
The Indicator Mounted on the Call Device will illuminate in sympathy with the filed warning devices  
The red Call LED and internal Buzzer will be activated in sympathy with the field warning devices.

#### **4.7 To Generate an “Attendant Distress Call” while a “Call Alarm” is in progress**

- 1, Locate a push button “Attendant Distress Call” device.
- 2, Press the button for around half a second.
- 3, The systems visual and audible Warning Devices will increase in speed, and will sound and flash twice per second.  
The Indicator Mounted on the Call Device will illuminate in sympathy with the filed warning devices  
The red Call LED and internal Buzzer will be activated in sympathy with the field warning devices.

#### **4.8 Reset an “Attendant Distress Call Alarm” using a “Remote Master Reset Device”**

- 1, Locate a “Remote Master Reset Device”
- 2, Insert and turn the enable key clock wise.
- 3, Press the Reset Button for around 1 second.
- 3, The “Attendant Distress Call Alarm” is Reset,  
All Field devices are silenced,
- 4, The field warning devices and the ECU buzzer will bleep twice.

#### **4.9 Reset a “Call Alarm” using a “Remote Master Reset Device”**

- 1, Locate a “Remote Master Reset Device”
- 2, Insert and turn the enable key clock wise.
- 3, Press the Reset Button for around 1 second.
- 3, The “Call Alarm” is Reset,  
All Field devices are silenced,
- 4, The field warning devices and the ECU buzzer will bleep twice.



## **5.0 Routine Testing and Maintenance.**

It is essential that the VPA-2 system is regularly tested and maintained properly to ensure consistent and reliable operation.

### **5.1 Routine Testing**

It is important that the entire VPA-2 system is regularly tested.

Once per month each "Call Alarm" device and "Attendant Distress Call Alarm" Device should be activated to ensure correct operation.

It is good practise to test the "Reset" devices regularly to allow easy system resetting when required.

The ECU Front mounted "Reset / Mute" button can be used to perform a simple self test of the system warning devices. See Section 3.5 for details.

The times mentioned above should be considered as minimum test periods, more frequent tests are preferable.

### **5.2 Routine Battery Maintenance**

If the system has a battery back up unit installed, It is important to regularly test it.

Once every quarter of a year the mains power should be turned off and a "Call Alarm" activation generated, the system "Warning Devices" should sound and illuminate at similar sound and light level as when then the system is operating from the mains supply.

The back up batteries should be replaced once every 4 years. If the warning devices are less loud or less bright then when the system is operating from the battery back-up supply, or if the mains supply is removed and the system does not function correctly.

For further detailed information about the VPA-2 System please feel free to visit the web page

[www.protectingpeople.co.uk/dpa](http://www.protectingpeople.co.uk/dpa)





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