External Sounders

External SAB/SCB Sounder/Strobes





















Models to comply with BS4737, PD6662 & BSEN50131



Evolution



Revolution



Compact



Oddity



image



Horizon



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Manufacturing Global Life Safety

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INTRODUCTION

Ventcroft's external sounder/strobes offer an unsurpassed range of models which provide for virtually any installation need. Most models feature a robust housing to conform to BS4737 PD6662 & BSEN50131 and have a loud Piezo sounder, high intensity strobe, twin status LED's, multiple tamper, re-chargeable battery, and a dual safe cut-off timer incorporating an engineer sounder "hold off".

The nt model provides negative trigger for the sounder and strobe, and negative tamper return, and provides the most competitive option. uk models provide for the same as nt but the tamper return is switched via relay contacts, designed to provide a higher level of security monitoring.

Important Note: The use of stranded steel cable or aluminium copper coated stranded cable or cable which has a resistance value of more than 120 Ohms per kilometre will invalidate the warranty of the sounder.

WIRING CONNECTIONS

- Hold off
- These terminals provide the inputs to SUPPLY the SAB/SCB circuitry with 12V constant un-switched supply. The positive terminal is also used to provide the positive supply for the strobe circuitry. The negative terminal commons as part of the tamper return. If either the positive or negative supply is removed the sounder will cease to be "held off" and begin to sound. On nt models if negative "hold off" is removed the tamper return signal will be removed. On uk models if either positive or negative "hold off" is removed the tamper return signal will be removed.
- TRG Provides the input for the negative applied signal used by the control panel to TRIGGER the sounder i.e. an intruder activation. In the UK the signal is normally a switched negative to activate the sounder.
- STB Provides the input from the control panel for the negative applied signal, which is required to activate the xenon STROBE. This input is independent of the sounder input, normally used by the control panel to allow the strobe to continue flashing after the sounder has stopped. In the UK this signal is normally negative applied. During operation the xenon tube utilises a high voltage across its terminals to create the intense flash. This voltage can exceed 250V DC and the strobe tube should never be touched. A high voltage can remain across the strobe for some time after the supply has been removed. NEVER ACTIVATE THE STROBE WITH THE PCB OUT OF ITS PROTECTIVE CASE. EXTREME CARE IS ADVISED TO REMOVE THE RISK OF ELECTRIC SHOCK.
- RTN Provides the switched negative RETURN signal, required by the control panel indicating that the tamper switch is closed, when closed the signal is a constant negative. nt models provide this signal directly through the micro-switch, which is also removed when "Hold-off" negative is disconnected. uk models provide this signal switched via a relay, which is removed with disconnection of either "Hold-off" positive or negative.
- + Sounder output, these terminals are high voltage and are only suitable for driving the Piezo sounder provided. NEVER connect any other wires to these terminals, or touch these terminals if the sounder is activated as there is a risk of electric shock.
- Provides the terminals to connect the backup rechargeable battery required to
 Battery
 activate the SAB/SCB circuit if the "Hold-Off" Voltage is removed. To activate the battery
 the battery jumper must be connected to complete the installation. Rechargeable batteries generally require replacing every three to five years to ensure correct SAB/SCB function.
- STB + If this option is fitted a positive supply must be applied either by connecting to strobe positive in the control panel or by linking STB+ to hold off + in the sounder.

INSTALLATION GUIDE

Operation

Step

- Decide and select which features and modes are required, i.e., LED's either "alternating" or "constant", sounder either "high-low" or "sweep" and mode either "SAB" or "SCB".
 A detailed description of the options can be found on pages 4 and 5.
- 2. Drill all holes required for mounting the sounder. Insert suitable rawl plugs to provide a strong and secure installation.
- 3. Move the white "Timer" jumper link to the "T" position. Now move the red "Battery" jumper link to the "on" position, the sounder will now start and continue for 5 seconds, then silence. Once the sounder has silenced, move the white "Timer" jumper link back to the "A" position. The sounder will remain silenced allowing all work to be carried out without unnecessary noise. This operation also tests the action of the dual fail-safe timer.
- 4. Fix the back-plate assembly to the wall with suitable screws. Connect the wires necessary to the bell box, make a note of the colour and terminals for later. Do not connect to the control panel yet.
- Fit the sounder front cover, ensure the micro-switch is operating correctly. As the
 Cover fixing bolt(s) is tightened, the micro-switch should be heard to click as the screw
 approaches the end of its travel.
- 6. Now wire to the control panel, the wire colours recorded in step 4 should aid in this process. A list of well known control panel connection diagrams can be found on pages 6 and 7.
- 7. It should now be possible to see the Amber and Red LED's in the bottom lens, they will either be flashing or constantly illuminated depending on the jumper link selection made earlier.

Commissioning & Testing Operation

Step

- Unscrew the cover fixing bolt(s), the sounder should start and the red LED should extinguish. Ensure the sounder runs beyond the 5 seconds test – this is to double check that the timer is not in "T" test position. Tighten the bolt(s) once again. The sounder should stop and the red LED should illuminate again. Some control panels may need resetting at this stage.
- 2. From the control panel, perform sounder and strobe tests. Most control panels have test modes detailed in their respective manuals. This test should be performed regularly to ensure correct and proper long term operation of the external sounder.

SPECIAL FEATURES

Selectable Options

Timer Select - White Jumper - (Included on all Models)

- A Provides standard 15 minute cut-off timer. (Factory Default)
- T Provides a 5 second sounder and timer engineer test. During installation and service this feature can be used to quickly silence the sounder at anytime.

Battery - Red Jumper - (Included on all Models)

- OFF In this position the battery is isolated, it can be used to quieten the sounder when no Hold-Off Voltage is present. (Factory Default)
- ON When in this position, the battery is connected in circuit, enabling the SAB/SCB Sounder circuit and battery charging circuit when Hold-Off Voltage is present.

Sounder Mode - Blue Jumper (Inside Case)

Some models may include a cut link to enable choice of sounder mode.

- SAB This is the standard sounder operation mode. It stands for Self Activated Bell. When the sounder is activated, its current is drawn from the control panel, except if the Hold-Off Voltage is removed or is missing. It provides maximum sounder volume. (Factory Default) If this selectable feature is excluded, the sounder will be set to SAB only
- SCB In this mode when the sounder is activated the current is provided from the on-board rechargeable battery, not from the control panel. This feature is ideal for secondary sounders where the control panel or power supply does not have sufficient current load capacity.

LED Selector - Black Jumper (Inside case)

(Not available on all models)

ALT When selected the Status LED's alternate from side to side. (Factory Default)

CONST When selected the red and amber Status LED's are illuminated constantly and do not flash

Siren - Yellow Jumper (Inside case)

(Some models have a cut link to choose Siren Sound options)

- Sweep When the sounder is activated it sounds like an American fire engine. It provides a higher pitch sound very effective over shorter distances. It is perceived to have a higher volume over small distances. (Factory Default)
- Hi-Lo When the sounder is activated it will sound like a British police car. It provides sound that travels well and is distinguished well from background noise.

High Bright LED Status Indicators

Provides a visual indication of the Sounder status and health, ideal for end user comfort, intruder deterrent and engineer feedback.

These LED's display at all times regardless of the set or un-set condition of the Control Panel (Included on all Models)

Amber LED Illuminates when the Hold-Off Voltage is connected correctly.

Red LED Illuminates only when the tamper switches are closed correctly and the Hold-Off

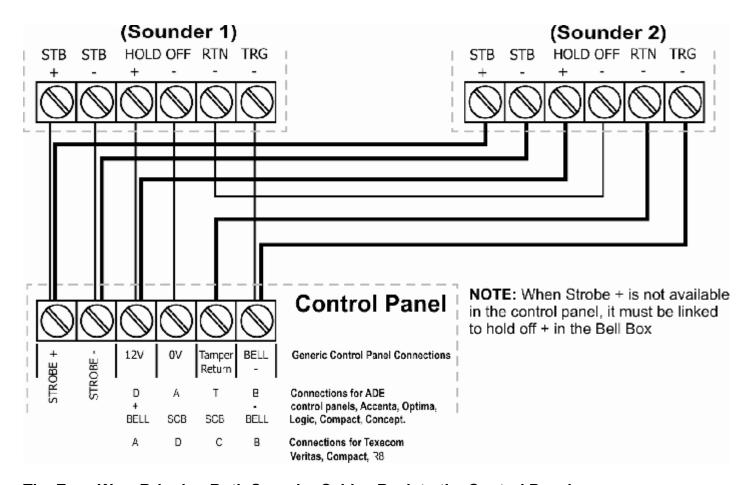
Voltage is present.

Engineer Sounder Hold off Facility

This feature allows an engineer to work on the Sounder with as little noise as possible. To limit the alarm ring time to a maximum of 5 seconds, simply move the white jumper timer link to the "T" test position. In this position whenever the sounder is requested to ring, it will do so for a maximum of 5 seconds. During installation, this can be very useful.

With this feature it is possible to completely install a Sounder without actually completing the wiring to the control panel, ideal for a first fix installation. Simply fit the timer link to "T" test position and turn the battery on by moving the battery link to "ON". The sounder will be activated for 5 seconds then stop. Move the timer link back to the 'A' position and leave the battery on, fit the Sounder making a note of the wire colours used. The completion of the control panel wiring to the Sounder may now be at the installer's discretion. Should the control panel not be wired for a number of days, the on-board battery may flatten and will take 24 hours to recharge. This is quite normal.

Connecting Two Sounders is Simple

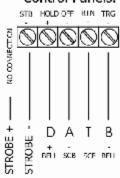


The Easy Way, Bringing Both Sounder Cables Back to the Control Panel

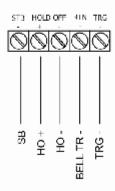
Simply run both sounder cables direct to the control panel. Connect both sounders in parallel to the control panel connections i.e. two wires in each terminal: reference diagrams above. Now from sounder ONE (Primary Sounder) remove the RTN wire from its terminal in the control panel and from sounder TWO remove the Hold OFF (-) from its terminal in the control panel. Finally now join the two loose wires together with a piece of connector strip. This completes the wire connections at the panel for the sounder.

Connection Diagram Examples

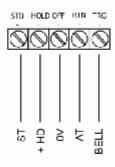
Connections for ADE, SL (Chloride Security Lighting) Accenta, Optima, Logic 4, Compact, Concept, Ideal, Ultimate. Control Panels.



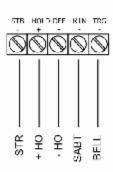
Connections for **Menvier** TS5000 Control Panels.



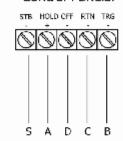
Connections for **DA**Control Panels.



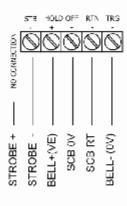
Connections for Castle Care-Tech Control Panels.



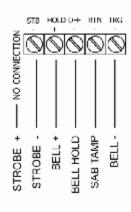
Connections for **Texecom**& **Regal** Safe Veritas,
Compact, R8, Regant.
Control Panels.



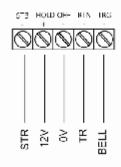
Connections for **A1 & Micromark** Omnicron, AJ6 etc. Control Panels.



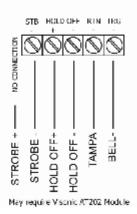
Connections for **Gardiner Technology** 300, 500, 800 Control Panels.



Connections for **Scantronic** 9448, 500R+ Control Panels.



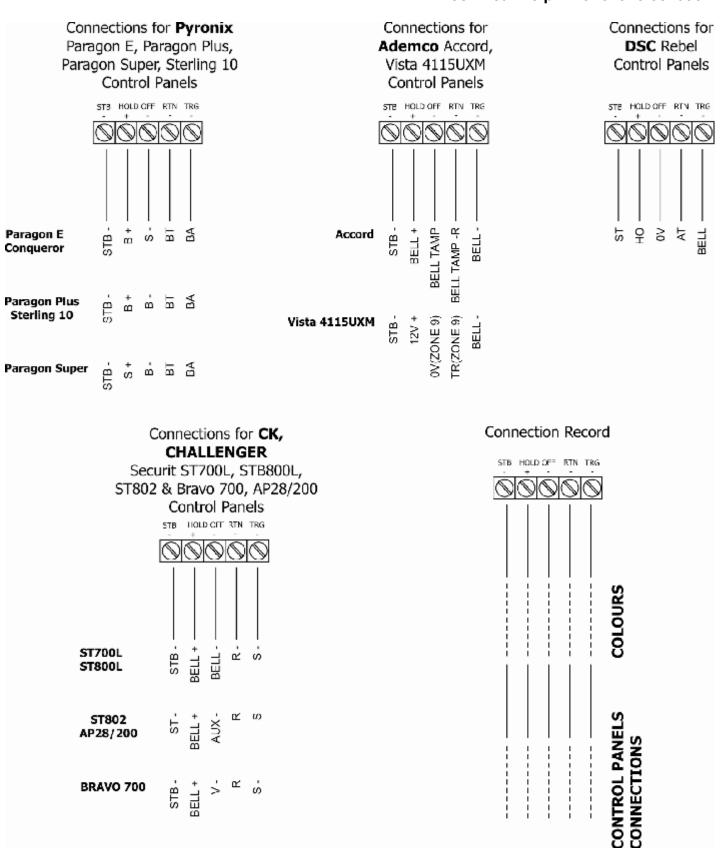
Connections for **Visonic**Power Max
Control Panels.



Please Note, whilst Ventcroft endeavour to provide exact reference connection diagrams, it is beyond the scope of these instructions to guarantee the exact terminal descriptions and positions as third party manufactures may make modifications without notice.

Connection Diagram Examples

Technical Help Line: 01928 581098



Please Note: Ventcroft Ltd. are pleased to include reference diagrams, but all information is given in good faith and without warranty.

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Housing The Cover, backplate and lens materials vary depending on model purchased - please check sounder specific specifications Screen Printing Available Up to 3 Colours - including Metallic Tamper Actuation Screw / Back **Negative Via Tamper Switch** Return - nt **Negative Via Relay Contacts** Hold-Off **Working Voltage** 13.2 V Nominal (10V - 15V) SAB Auto Activation Standby Current 7V Nominal (5V - 8V) Alternating LED's Constant LED's 42.3 mA 53.3 mA Xenon Strobe Working Voltage 13.2 V Nominal (10V 15V) Current 130 mA Nominal (150 mA Max.) Tube 2W Linear Xenon Flash Rate 1 Hz Nominal (50-120 per min.) Trigger **Negative Applied** Sounder Current Single Piezo 125 mA (160mA Max.) Twin Piezo 265 mA (300 mA Max.) **Sound Pressure** Single Piezo 114 dBA @ 1M (116 dBA Peak@ 1M) Twin Piezo 117 dBA @ 1M (119 dBA Peak@ 1M) **Negative Applied / Positive Removed** Triager **Cut-Off Timer** 15 minutes Nominal 5 Seconds Nominal Battery Voltage **Charge Current** 5.5 mA Nominal Trickle From Discharged 13.8 mA Max. **Charge Time** 24 Hours Type NimH **Product Coating** Type **HPA**, High Performance Acrylic Military Approval MIL-1-46058C Temperature Storage -25°C to +60°C Working **Electronics** -25°C to +55°C **Battery** Nom. +15°C; Min. 0°C, Max.+65°C Standards European Designed to Conform to European Union Safety Low Voltage Directive (LVD) 73/23/EEC (amended by 89/336/EEC). **EMC Designed to Conform European Union** Electro-Magnetic Compatibility (EMC)
Directive 89/336/EEC (amended by 92/31/EEC and 93/68/EEC). Warranty 2 Year (Return to Base)

If you experience any difficulties with this product, please call our Technical Help-Line

01928 581098

or e-mail: tech.help@ventcroft.co.uk Who will be more than happy to assist you with any Ventcroft product query



The Manufacturer shall have no liability for any death, personal and or bodily injury and or damage to property or other loss whether direct, indirect, incidental, consequential or otherwise, based on a claim that the Product failed to function. However, if the Manufacturer is held liable, whether directly or indirectly, for any loss or damage arising under this limited warranty or otherwise, regardless of cause or origin, the Manufacturer's maximum liability shall not in any case exceed the purchase price of the Product, which shall be fixed as liquidated damages and not as a penalty, and shall be the complete and exclusive remedy against the Manufacturer.