

## Advantages of a BS 5839 Part 6 Grade C system over a Grade D system

- Fault monitoring of the power supply.
- Fault monitoring of the interconnecting wiring.
- Allows residents to silence & test the system at floor level.
- Does not require mandatory replacement of devices every ten years.

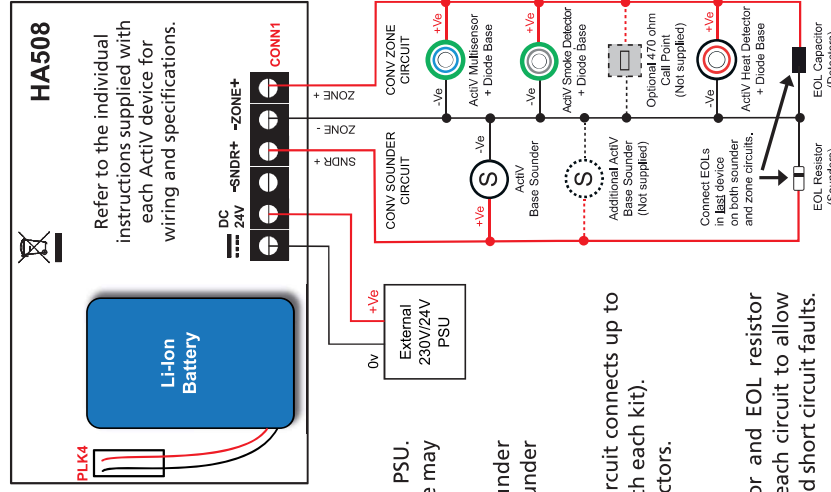
## HUSH-ACTIV WIRING AND CONNECTIONS (see Fig.2 for typical connections)

All wiring must be installed in accordance with all applicable national, regional or local standards. In the UK, this is BS 7671 (Wiring Regulations) and BS 5839-6 (Grade C System).

Fit 35mm deep double gang UK back boxes for both the Hush-Activ Controller (HA508) and the Hush PSU. The Hush-Activ system should be tested monthly per BS 5839-2 or applicable national, regional or local regulations.

All -Ve terminals on CONN1 are common -Ve. Typically, the conv. detector (ZONE) and sounder (SNDR) circuits may be wired using 3-core cable, e.g. 1mm to 1.5mm triple & earth cable. Alternatively, separate 2 x 2-core cable may be used. All terminals can accept cables up to 1.5mm.

Fig.2 - Typical HAK/1 Hush-Activ Connections



**PLK4 (Battery connector):** To reduce battery drain, it is recommended that the battery is connected after the external 24V power is applied.

**CONN1 (DC 24V):** Connects to 24V external PSU. Typically, 1mm to 1.5mm twin & earth cable may be used.

**CONN1 (-SNDR+):** The conventional sounder circuit connects up to 8 Activ sounders (1 sounder supplied with each kit).

**CONN1 (-ZONE+):** The conventional zone circuit connects up to 16 Activ detectors (3 detectors supplied with each kit). Use the supplied diode bases with the detectors.

**Note:** Connect the supplied EOL capacitor and EOL resistor across the terminals of the last device on each circuit to allow the wiring to be line monitored for open and short circuit faults.

## HUSH-ACTIV KITS INSTALLER'S GUIDE



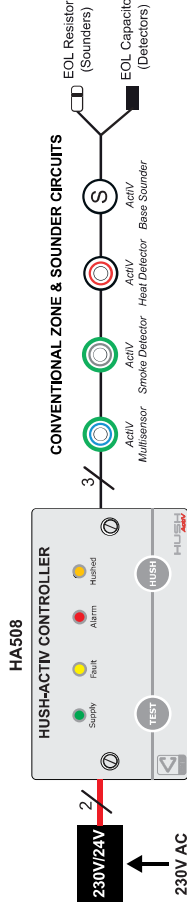
Read these instructions before installation and operation

**THIS EQUIPMENT MUST BE INSTALLED AND MAINTAINED BY A SUITABLY SKILLED AND TECHNICALLY COMPETENT PERSON. ENSURE ALL POWER IS REMOVED BEFORE INSTALLATION.**

The Hush-Activ standalone domestic fire alarm kits have been designed to reduce the incidence of false alarms in HMOs, dwellings, flats, etc., by providing a reliable, fully monitored fire detection and alarm system complete with hush (silence) and test functions.

	1 x Hush-Activ BS 5839-6 Grade C controller
	1 x 230V/24V PSU
	1 x Activ heat detector
	1 x Activ optical smoke detector
	1 x Activ multisensor detector
	3 x Activ detector diode bases
	1 x Activ base sounder c/w white lid & adaptor plate
	1 x 0.47µF 50V EOL capacitor, 1 x 6K8 0.25W EOL resistor
<b>HAK/11 kit content</b>	As HAK/1, minus multisensor detector and base




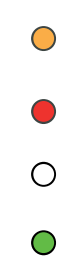
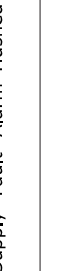


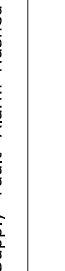
Fig.1 - Typical HAK/1 Hush-Activ System



## HUSH-ACTIV TECHNICAL SPECIFICATION

<b>Max. number of Activ conventional devices per system:</b>	16 Activ detectors (multisensor, heat, smoke) plus 8 Activ sounders. <b>Note:</b> See list above for devices supplied with Hush-Activ kits.
<b>Max. length of device circuit:</b>	200m
<b>Operating voltage:</b>	24Vdc
<b>Replaceable battery (2Ah):</b>	Li-Ion rechargeable battery (C-TEC supplied only, up to 10 year life). For 16 devices, provides >72 hour standby plus 5 minute alarm (under normal use).
<b>LED indicators:</b>	Supply (Green) LED. Lit steady when powered from the external PSU. Lit flashing when external PSU fails and the unit is only powered from the onboard battery. Fault (Yellow) LED. Lit flashing when there is a wiring/battery fault, device head out. Alarm (Red) LED. Lit steady when there is a fire alarm. Hushed (Amber) LED. Lit steady when the unit is in a hushed (silenced) state.
<b>Onboard beeper:</b>	Provides audible feedback when a button is pressed and in a fire/fault condition.
<b>Control buttons:</b>	1 x TEST button & 1 x HUSH button - see 'Hush-Activ Operation' overleaf.
<b>Dimensions (mm):</b>	144 (W) x 84 (H) x 25 (D)
<b>Weight:</b>	160g
<b>Operating Temp.:</b>	-10°C to +55°C
<b>Body Material:</b>	PVC
<b>IP Rating (EN 60529):</b>	IP40 (indoor use only)
<b>Humidity:</b>	Max. 95% RH (non-condensing)

## HUSH-ACTIV SYSTEM OPERATION

System State	State Condition	Hush-Activ Indicators	What Happens at the Hush-Activ System?
1	Normal Operation	 Supply Fault Alarm Hushed	<ul style="list-style-type: none"> <li>Power is applied to the zone circuit (fire detection) and sounder circuit (alarm system). The circuits are monitored for open and short circuit faults.</li> </ul>
2	Fire	 Supply Fault Alarm Hushed	<ul style="list-style-type: none"> <li>Beeper sounds.</li> <li>HUSH button press moves the system to State 3.</li> <li>Alarm sounders are activated.</li> <li>Detection zone resets every 60 seconds and requires a confirmation fire condition to stay in this state.</li> <li>If the fire condition clears, the system resets and then automatically returns to State 1.</li> </ul>
3	HUSH button pressed when in Fire	 Supply Fault Alarm Hushed	<ul style="list-style-type: none"> <li>Beeper pulse rate gradually increases during the hushed period (10 seconds ⇒ 50 seconds ⇒ 90 seconds).</li> <li>HUSH button press resets the hushed timer for another 120 seconds.</li> <li>If the fire condition is cleared within 120 seconds, the system automatically returns to State 1.</li> <li>After 120 seconds (and the HUSH button is NOT pressed), the system moves to State 2.</li> </ul>
4	HUSH button pressed when no Fire or Fault	 Supply Fault Alarm Hushed	<ul style="list-style-type: none"> <li>Beeper pulse rate gradually increases during the hushed period (10 minutes ⇒ 15 minutes).</li> <li>HUSH button press returns to the system State 1 after a hushed period of 0 to 12 minutes. After a hushed period of 13 to 15 minutes, HUSH button press resets the hushed timer for an additional 15 minutes.</li> <li>After 15 minutes, the system automatically returns to State 1.</li> </ul>
5	General Fault	 Supply Fault Alarm Hushed	<ul style="list-style-type: none"> <li>Beeper sounds.</li> <li>HUSH button press moves the system to State 6.</li> <li>If the fault condition clears, the system resets and then automatically returns to State 1.</li> </ul>
6	HUSH button pressed when in Fault	 Supply Fault Alarm Hushed	<ul style="list-style-type: none"> <li>Beeper muted.</li> <li>HUSH button press resets the hushed timer for another 24 hours.</li> <li>Detection zone resets every 60 seconds and requires a confirmation fault condition to stay in this state.</li> <li>If the fault condition clears, the system resets and then automatically returns to State 1.</li> </ul>
7	Mains Fault	 Supply Fault Alarm Hushed	<ul style="list-style-type: none"> <li>Beeper sounds.</li> <li>HUSH button press moves the system to State 6.</li> <li>If the fault condition clears, the system resets and then automatically returns to State 1.</li> </ul>
8	<u>To Enter Test Mode</u> Press and hold the TEST button for >3 seconds.	 Supply Fault Alarm Hushed	<ul style="list-style-type: none"> <li>Alarm sounders are activated for 5 seconds and then the system automatically returns to State 1.</li> </ul>