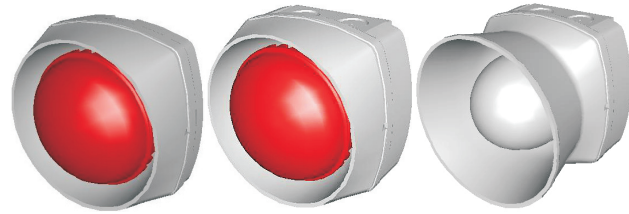


S³ Mark II - Data and Installation

Addressable Sounder and Sounder Strobe Devices



Low profile S³

System S³

These instructions cover the following range of loop wired addressable S³ devices:

Low profile range

Body	Sounder		Sounder Strobe (red lens)	
	Deep base	Shallow base	Deep base	Shallow base
White	S3IP-SN-W-V2	S3-SN-W-V2	S3IP-SN-ST-WR-V2	S3-SN-ST-WR-V2
Red	S3IP-SN-R-V2	S3-SN-R-V2	S3IP-SN-ST-RR-V2	S3-SN-ST-RR-V2

Low profile variants

Sounder Strobe	
Red	S3IP-SN-ST-RW-V2 (white lens)
White	S3IP-SN-ST-WA-V2 (amber lens)



◆-marked parts are LPCB approved
The S2IP-SN-R3-V2 and S2IP-SN-W3-V2 products are suitable for retrofitting and are supplied with a 6-way terminal block to ease cable connection.

System range	
Sounder	
Red	S2IP-SN-R-V2 (2-way) ◆
White	S2IP-SN-W-V2 (2-way) ◆
Red	S2IP-SN-R3-V2 (3-way) ◆
White	S2IP-SN-W3-V2 (3-way) ◆

These products are not visual alarm devices and does not meet EN 54-23.

The Strobe function is not LPCB approved.

Note: The *system range* of products do not support strobe options.

The low power addressable **Sounder** and combined **Strobe** products provide audible and visual alarm signals and are designed for use in **Gent** analogue addressable fire alarm systems.

Each S³ is supplied with either a deep base (40mm) or shallow base (25mm), offering IP55C and IP31C ratings respectively.

In addition to the products covered in this leaflet there are Speech Sounder Strobe and Strobe only variants available, for more information contact your supplier.

The S³ product range incorporates innovative design features protected by Patents GB2388994, GB2388995 and GB2388916. The product design has also been registered.

Do's and Don'ts

Do's

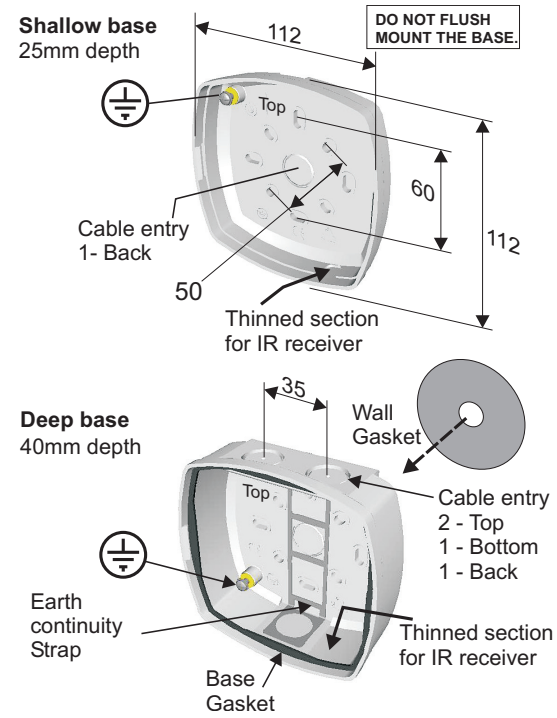
- Ensure your addressable system can accept S³ products, if in doubt contact your supplier
- Use correct method to open and close the device
- Mount the device in correct orientation with 'TOP' uppermost, to allow remote control operation
- Fit the **wall gasket** first when installing the deep base if IP55C protection is required

Ensure the **transparent cover** is in place over the PCB
Ensure the **earth continuity strap** is in place in the **deep base**.

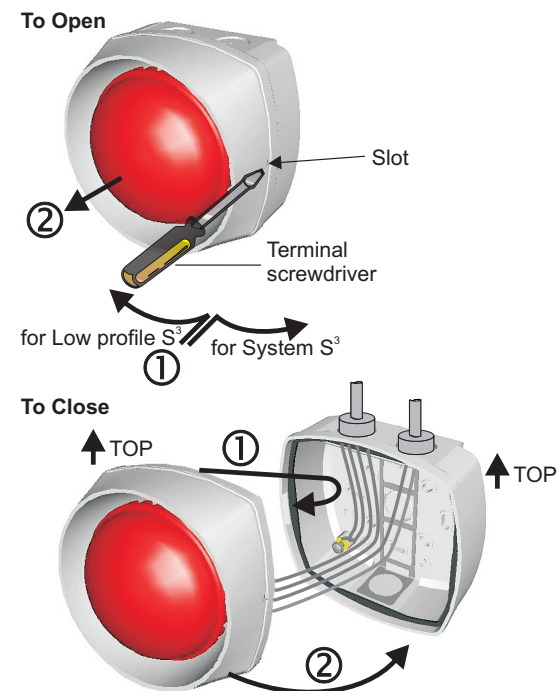
Don'ts

- Don't flush mount the base
- Don't have excessive incoming cable slack
- Don't mount the device above obstructions, such as shelves, that can prevent its operation with the IR remote control
- Don't install the S³ device such that the audible and visual outputs are obstructed
- Don't paint the device enclosure.

Bases

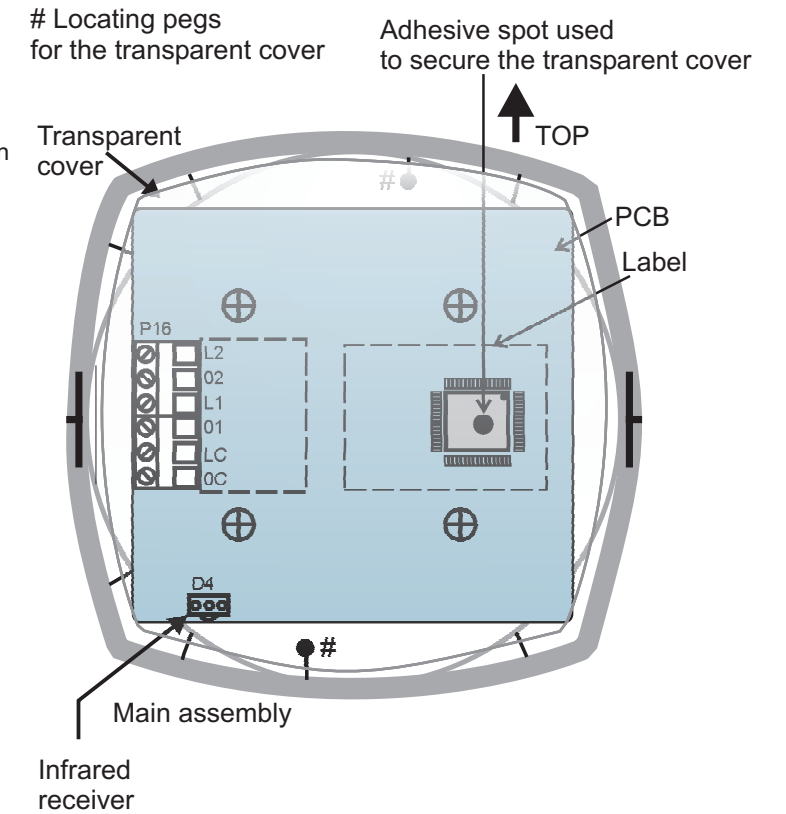


How to open and close the assembly

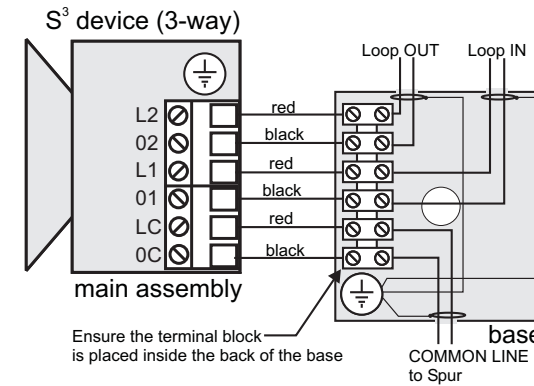


Installation

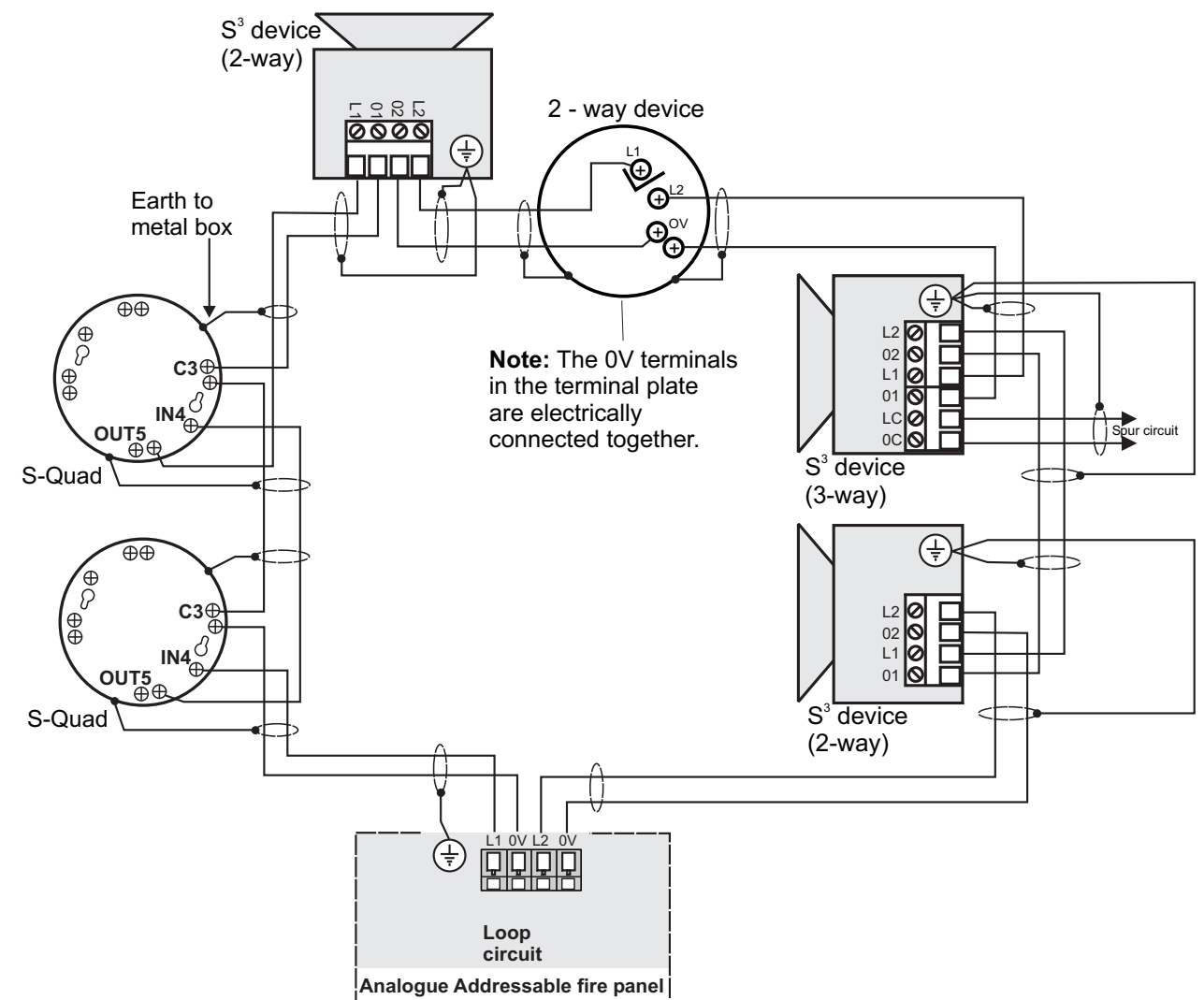
- 1 Drill or knockout the required cable entry points on the **Base**.
- 2 If using the deep base option and IP55C protection is required, then stick on the circular **wall gasket** on to the centre back of the **base**.
- 3 Secure the Base to the wall whilst ensuring Top of the Base is in correct orientation.
- 4 Terminate the cable at the entry point leaving no more than 10cm (4") tail wire length for connection.
- 5 Ensure the **transparent cover** is in place over the **PCB**. Connect the wires to the terminal block, see Wiring.
- 6 Close the main assembly to the base.



Terminal block for retrofit installation of System S³



Wiring



Operation of sound and strobe light

The S³ devices on each loop circuit of the fire panel are set up during commissioning. The devices are set up to operate the sound and strobe light output in accordance with site specific evacuation procedures. In the event of a fire the appropriate S³ device in the system will output standard tone alarm signals 1, 2 or 3:

- Signal 1 is at 0.5Hz strobe output
- Signal 2 is at 1Hz strobe output
- and Signal 3 is at 1Hz strobe output.

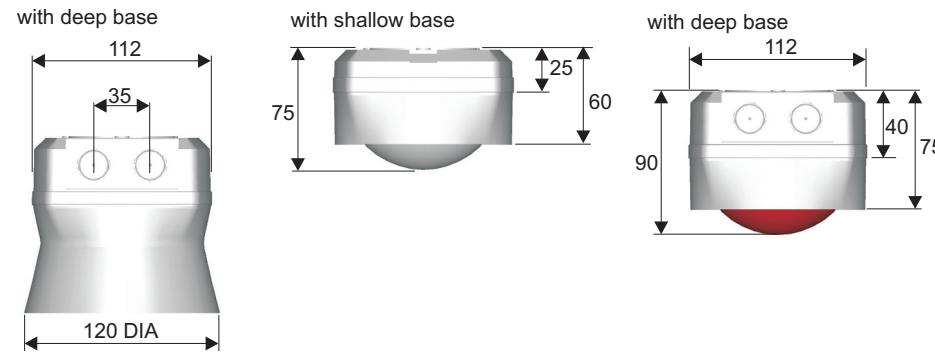
The sound configurations of the three signals are held in the panel's memory.

Signals

Signal	Description
Signal 1*	Intermittent tone 970Hz @ 1Hz
Signal 2*	Alternating tone 800/970Hz @ 2Hz
Signal 3*	High Tone (Continuous 970Hz)

The Signals marked with an * are LPCB approved.

Technical data



Note: If you have a sounder only product then ignore the strobe information given.

Sound output for standard tone (levels given are typical values with measurement taken at 90° at 1m anechoic - fast response) #	Low profile S ³ - 100dBA +/- 3dBA System S ³ - 103dBA +/-3dBA
Panel tones of signals 1, 2 and 3	configurable at the panel
Standard	EN54:3:2001 (Sounder only) EN54:17:2005
Strobe flash rate	Signal 1 - 0.5Hz Signal 2 - 1Hz Signal 3 - 1Hz
Strobe light output with red / amber lens	equivalent to 3W Xenon flasher
Loop loading factors	<i>per device</i>
Standard tone	5
Standard tone with red or amber Strobe	13
Standard tone with white Strobe	37
Operating voltage	range 35V to 41V
Terminal size	2.5mm ² - maximum
IP rating	with deep base IP55C with shallow base IP31C
Enclosure colour	White and Red - (with red, amber or white translucent lens cover for the Strobe)
Enclosure material	Flame retardant ABS (Strobe cover is polycarbonate) The plastic enclosures meet the flammability requirements of ISO 1210:1992 Class FH-2.
Weight	0.3Kg approximate
Operating temperature	-10°C to +50°C
Storage temperature	-20°C to +70°C
Relative humidity (non condensing)	up to 90%
IR operating distance (used for setting volume)	3m
EN54-17 data	V _{max} 42V I _C max 0.4A V _{nom} 40V I _S max 1A V _{min} 24V I _L max 4μA V _{SO} max 10.6V Z _C max 112mΩ V _{SO} min 9.8V

The addressable S³ products are fully synchronised on the same fire panel.

Minimum volume setting a Sound Pressure Level (SPL) of above 65dB(A) is achieved in at least one direction in all operational modes.


Information on minimum sound output levels to include polar dispersion is covered in technical note TECH6310_029, available on request from the manufacturer.

Compatibility

At the time of releasing this data sheet the S-Cubed Mark II devices were compatible for installation on the loop circuits of fire alarm system based on:

≥ mean - Greater than or equal to.	EN panels				
	Vigilon 4 Loop	Vigilon Compact	Vigilon Compact VA	Vigilon 4-6 Loop	All panels
Card ->	MCC	MCB	MCB	MCC	LPC
	≥4.30	≥4.30	≥4.30	≥4.37	≥4.30

≥ mean - Greater than or equal to.	BS panel	
	Vigilon	
Card ->	MCC	LPC
	≥3.90	≥3.90



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Gent by Honeywell (Novar Systems Limited)
Manufactured by: Honeywell Life Safety Systems,
140 Waterside Road, Hamilton Industrial Park,
Leicester, LE5 1TN, United Kingdom

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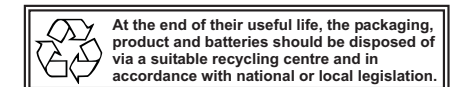
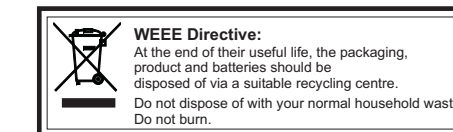
DoP	Product No.	DoP	Product No.
033-CPR-2013	S3-SN-R-V2	039-CPR-2013	S2IP-VP-R
033-CPR-2013	S3-SN-W-V2	040-CPR-2013	S3-VP-R
035-CPR-2013	S3IP-SN-R-V2	040-CPR-2013	S3-VP-W
035-CPR-2013	S3IP-SN-W-V2	041-CPR-2013	S3-VP-ST-WR
036-CPR-2013	S2IP-SN-R-V2	041-CPR-2013	S3-VP-ST-RR
036-CPR-2013	S2IP-SN-W-V2	042-CPR-2013	S3IP-VP-R
037-CPR-2013	S3-SN-ST-RR-V2	042-CPR-2013	S3IP-VP-W
037-CPR-2013	S3-SN-ST-WR-V2	043-CPR-2013	S3IP-VP-ST-WR
038-CPR-2013	S3IP-SN-ST-RR-V2	043-CPR-2013	S3IP-VP-ST-RR
038-CPR-2013	S3IP-SN-ST-WR-V2		
038-CPR-2013	S3IP-SN-ST-RW-V2		

EN54-3: 2001 + A1: 2002 + A2: 2005 , EN54-17: 2005

S3-SN-R-V2	(EN54-3 & 17)	S2IP-VP-R	(EN54-3 & 17)
S3-SN-W-V2	(EN54-3 & 17)	S3-VP-R	(EN54-3 & 17)
S3IP-SN-R-V2	(EN54-3 & 17)	S3-VP-W	(EN54-3 & 17)
S3IP-SN-W-V2	(EN54-3 & 17)	S3-VP-ST-WR	(EN54-3 & 17)
S2IP-SN-R-V2	(EN54-3 & 17)	S3-VP-ST-RR	(EN54-3 & 17)
S2IP-SN-W-V2	(EN54-3 & 17)	S3IP-VP-R	(EN54-3 & 17)
S3-SN-ST-RR-V2	(EN54-3 & 17)	S3IP-VP-W	(EN54-3 & 17)
S3-SN-ST-WR-V2	(EN54-3 & 17)	S3IP-VP-ST-WR	(EN54-3 & 17)
S3IP-SN-ST-RR-V2	(EN54-3 & 17)	S3IP-VP-ST-RR	(EN54-3 & 17)
S3IP-SN-ST-WR-V2	(EN54-3 & 17)		
S3IP-SN-ST-RW-V2	(EN54-3 & 17)		

Intended for use in fire detection and fire alarm systems in and around buildings

Refer to 033-CPR-2013, 035-CPR-2013, 036-CPR-2013, 037-CPR-2013, 038-CPR-2013, 039-CPR-2013, 040-CPR-2013, 041-CPR-2013, 042-CPR-2013, 043-CPR-2013 for level or class of performance declared, for details see website www.gent.co.uk



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