

# S<sup>3</sup> Addressable Speech Sounder and Strobe Devices



Low profile S<sup>3</sup>      System S<sup>3</sup>

These instructions cover the following range of addressable S<sup>3</sup> devices:

### Low profile range

	Speech Sounder		Speech Sounder Strobe (red lens)	
	Deep base	Shallow base	Deep base	Shallow base
White	S3IP-VO-W	S3-VO-W	S3IP-VO-ST-WR	S3-VO-ST-WR
Red	S3IP-VO-R	S3-VO-R	S3IP-VO-ST-RR	S3-VO-ST-RR

### System range

	Speech Sounder
	Deep base
White	S2IP-VO-W
Red	S2IP-VO-R

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



The **Sounder** in all the S<sup>3</sup> products listed above have been approved by the Loss Prevention Certification Board and meets the requirements of **EN54:Part 3:2001** which is the standard for **Fire Alarm Devices - Sounders**.

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

The S<sup>3</sup> devices are supplied with standard speech messages along with sounder and strobe option. The devices are configured during commissioning to operate to site specific requirement. The devices are supplied with either a deep base (40mm) or a shallow base (25mm), offering IP55C and IP31C ratings respectively. The system range is available with deep base only.

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

The S<sup>3</sup> product range incorporates innovative design features for which design Patents applications are pending. The product design has also been registered.

### Do's and Don'ts

#### Do's

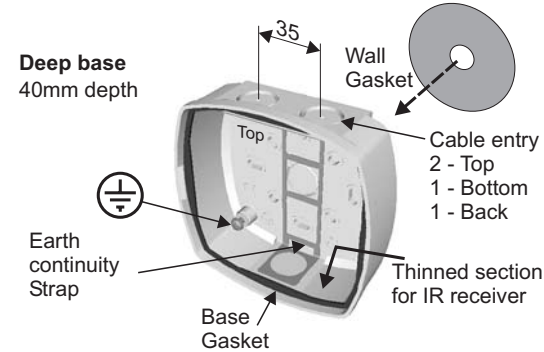
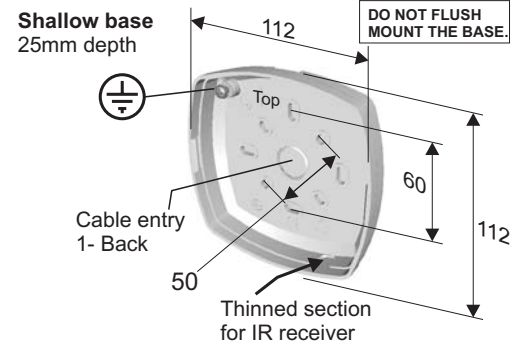
- Ensure the addressable system can accept S<sup>3</sup> products, if in doubt contact your supplier
- Use correct method to open and close the device
- Mount the device in correct orientation with 'TOP' uppermost, to allow remote control operation

- 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

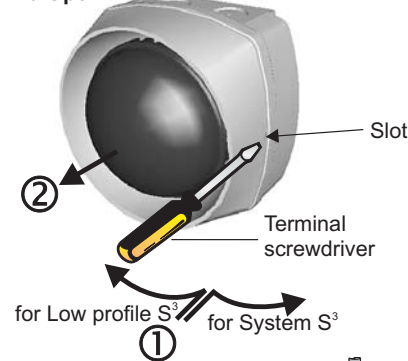
- Don't flush mount the Base.
- Don't mount the device above obstructions, such as shelves, that can prevent its operation with the IR remote control
- Don't have excessive incoming cable slack
- Don't locate unit such that the audible and visual outputs are obstructed
- Don't paint the device enclosure.

### Bases

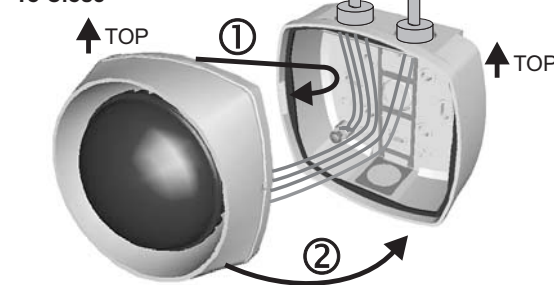


### How to open and close the assembly

#### To Open



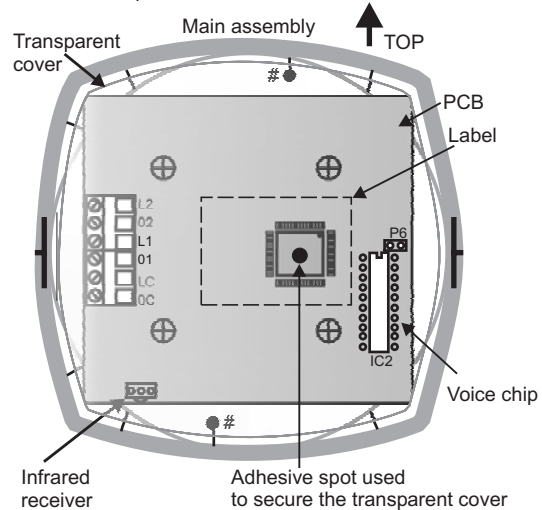
#### To Close



### Installation

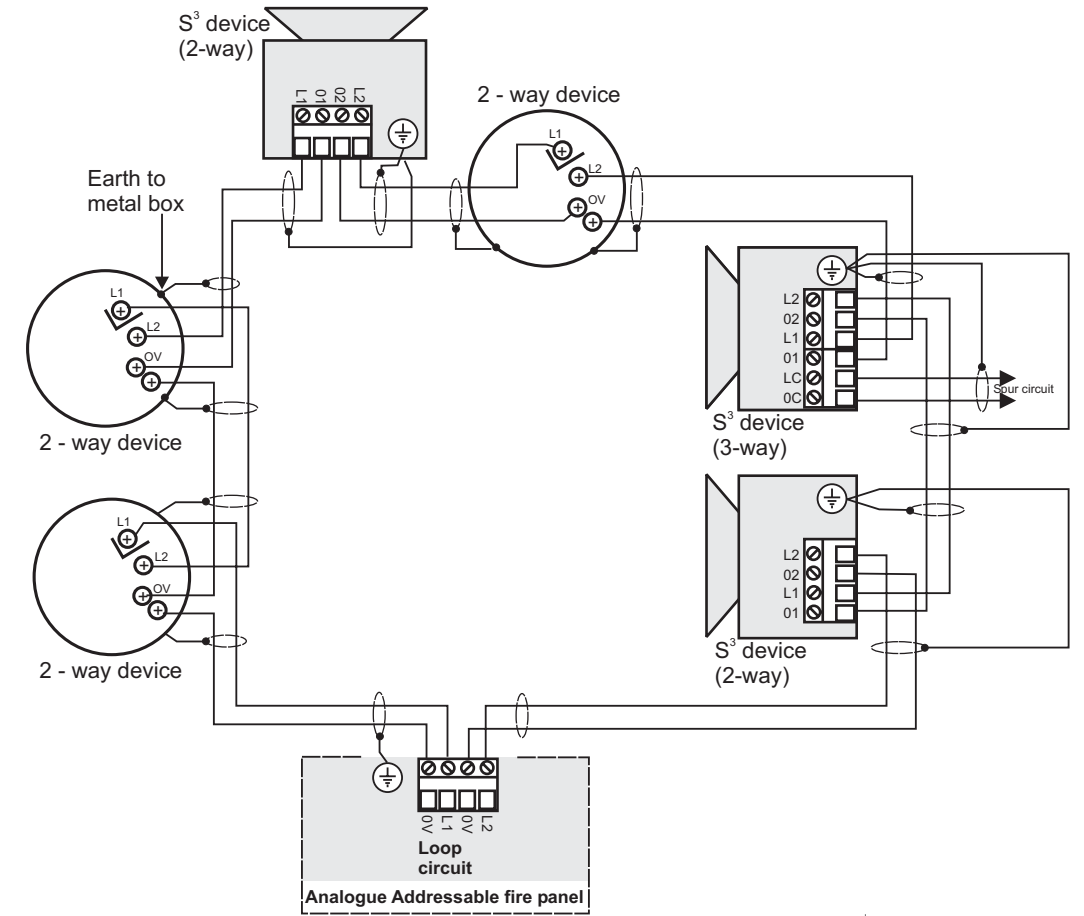
- 1 Drill or knockout the required cable entry points on the **Base**.
- 2 If using the deep base option and IP55C protection is required, then stick on the circular **wall gasket** on to the centre back of the **base**.
- 3 Secure the Base to the wall whilst ensuring Top of the base is in correct orientation.
- 4 Terminate the cable at the entry point leaving no more than 10cm (4") tail wire length for connection.

# Locating pegs for the transparent cover

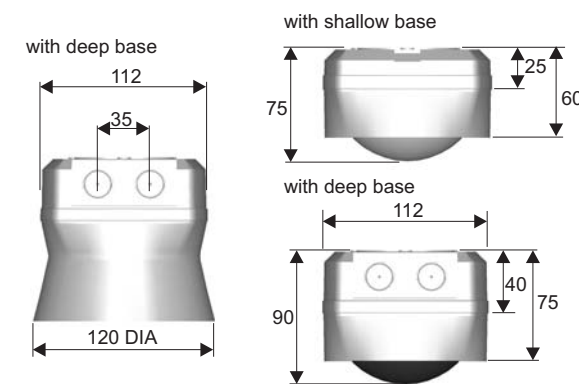


- 5 Ensure the **transparent cover** is in place over the **PCB**. Connect the wires to the terminal block, see Wiring.
- 7 Close the **main assembly** to the base.

### Wiring



### Technical data



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

Sound output for standard tone (levels given are <b>typical values</b> with measurement taken at 90° anechoic - fast response) #	Low profile S <sup>3</sup> - 100dBA +/-3dBA
	System S <sup>3</sup> - 103dBA +/-3dBA
Standard (for sounder only)	EN54:Part 3:2001
Messages, Tones and Strobe flash rate	see tables 1 and 2
Strobe light output with red lens	equivalent to 3W Xenon flasher
Operating voltage	range 35V - 41V
Terminal size	2.5mm <sup>2</sup> maximum
IP rating	with deep base IP55C with shallow base IP31C

Loop loading factors	per device
Standard tone with Speech	5
Standard tone with red Strobe plus Speech	15
Complex tone 'Tone n' with red Strobe	23
Enclosure colour	White and Red (with red 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 selecting volume level)	3m
Message and attention Tone period	10 seconds

The addressable S<sup>3</sup> products are fully synchronised on the same fire panel.

# Information on minimum sound output levels to include polar dispersion is covered in technical note TECH6310\_029, available on request from manufacturer.

## Addressable Speech Sounder and Strobe

Note: Only the messages and complex tones specified in table 1 are applicable to this S<sup>3</sup> product.

table - speech and complex tones

Message No.	Speech message
Message 1	<i>Attention please this is an emergency please leave the building by the nearest available exit.</i> (female voice)
Message 2	<i>An incident has been reported in this building please await further instructions.</i> (female voice)
Message 3	<i>This is a test message no action is required.</i> (female voice)
Message 4	<i>This is a fire alarm! Please leave the building immediately by the nearest available exit.</i> (male voice)
Tone No.	Description of tone
Tone 1	<b>Alarm Bell</b> (equivalent to 8" Solenoid Bell) <b>106dBA @ 1m</b>

Standard voice messages and tones  
(Voice type IC 2202-001)

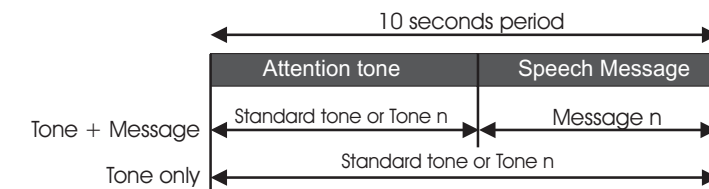
## Methods of operation

There are two methods of operating this S<sup>3</sup> device:

- with *tone* followed by *speech message* 'Voice Mode' or
- alternatively with *tone* only 'Tone mode'.

In voice mode the S<sup>3</sup> outputs an **attention tone** followed by a **speech message** spans over a 10 seconds period. The sequence is repeated until the alarm is stopped by the fire panel. Throughout the alarm duration the **strobe** light will operate.

in the tone mode the S<sup>3</sup> outputs a tone that can be either a *standard tone* or a complex tone *Tone n*, see table. The *standard tone* Signals 1, 2 and 3 are those held in the fire panel memory.



Standard tone - held in the panel memory

Tone n - Complex tone held in the S<sup>3</sup> voice chip

Message n - Speech message held in the S<sup>3</sup> voice chip

(n signifies message or tone number see table)

## Operation of speech sounder and strobe

The S<sup>3</sup> devices connected to the loop are set up during commissioning of the system. Each S<sup>3</sup> in the system will operate either in the **voice mode** or in **tone mode**.

In the event of a fire the appropriate S<sup>3</sup> device in the system will output alarm signals according to the site specific configuration and these can be either signal 1, 2 or 3 alarm:

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