






## Base with acoustic signalling device



Detector mounting base with integrated acoustic signalling device. The base can be used to host Tecnofire addressable detectors. Base and detector share the same programming menu, but have no operational interdependence. The activation of the acoustic signal is subject to the result of the management formula associated with the detector. The silencing of the acoustic signal depends on the operating criterion used. Programmable functions: 8 sound modes, volume adjustment 2 levels, 3 operating criteria. RSC® management: programming, remote management and control. Protection rating IP22. Polycarbonate V0 casing. White colour. Dimensions (D x H) 108 x 35mm. Approved EN 54-3:2001 + A1:2002 + A2:2006. Certification: 1293-CPR-0558.

MODEL						
Name	Item no.					
TFBASE-SOUNDER	TF6TFSOUNDERN					

### OBLIGATIONS AND NOTICES

The TFBASE-SOUNDER mounting base can only be used when connected to a detection loop of compatible Tecnofire control panels.

The TFBASE-SOUNDER meets the requirements of EN 54-3 and EN 60529 only when installed with compatible Tecnofire detectors.

The applicable standards must be observed and applied during the design and installation.

### GENERAL

The TFBASE-SOUNDER incorporates an acoustic signalling device that is particularly suitable for the diffusion of acoustic alarms in small spaces with a high level of acoustic insulation, such as hotel rooms, small offices, toilets, etc.

The TFBASE-SOUNDER emits an alarm at a sound level suitable for the application context.

### GENERAL INSTRUCTIONS FOR USE

In the event of an alarm, the perceived sound level in the room must be 5 dB(A) higher than the ambient noise.

The perceived sound level of the room occupants must be between a minimum of 65 dB(A) and a maximum of 120 dB(A).

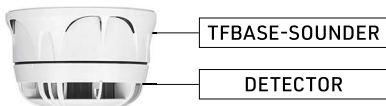
In hotel rooms in particular, the perceived noise level at the head of the bed must be 75 dB(A).

### ALARM REPEATER

An optical alarm repeater can be connected to the TFBASE-SOUNDER; the repeater must be a Tecnofire TFRIP. Attention, repeaters of other brands can modify the correct functioning of the TFBASE-SOUNDER.

### RELATION BETWEEN TFBASE-SOUNDER AND DETECTOR

From a functional point of view, there is no logical interdependence between the TFBASE-SOUNDER and the detector. The detector and the TFBASE-SOUNDER share the identifier (line number + detector number) and the programming parameters that define the operation of the TFBASE-SOUNDER. The parameters are included in the programming menu of the detector.

RELATION BETWEEN TFBASE-SOUNDER AND DETECTOR	
	
PROGRAMMING	The TFBASE-SOUNDER shares the detector programming menu
IDENTIFIER	The TFBASE-SOUNDER shares the host detector identifier: Loop x - Detector xxx
OPERATION	The operation of the TFBASE-SOUNDER and the detector have no interdependent relationship

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ADDRESSABLE

## FACTORS INFLUENCING ACOUSTIC PERFORMANCE

Preliminary note: The fire alarm signal must reach everyone in the building at an adequate sound level.

When designing, it is important to assess the sound propagation in the building, taking into account differences in height and compartmentalisation.

It is preferable to distribute the acoustic warning devices in a capillary manner rather than using a few high-powered sounders.

However, for each installation environment it is necessary to assess all environmental factors that may reduce or increase the acoustic performance of the warning device.

Among these, it is important to assess the level of background noise generated by the environment and its occupants.

The level of ambient background noise will vary from building to building, depending on the intended use and architectural design.

For design purposes, it is necessary to carry out phonometric measurements that provide objective values of the background noise levels in rooms.

However, it is not always possible to carry out this activity before the project is drawn up.

To overcome this drawback, it is possible to use tables that indicate the typical background noise level, expressed in dB(A), for different types of building.

These tables give a range of values between minimum and maximum.

To carry out a proper evaluation and draw up a good project, always refer to the technical report UNI/TR 11607.

## CONNECTION TO THE LOOP

It is mandatory to connect the TFBASE-SOUNDER according to the connection scheme.

For reasons of electrical safety and to avoid induced interference, the cable shield of each loop must be connected in continuity from one device to the next, so that it is never interrupted.

In turn, the cable shields of each loop must be connected in continuity from one loop to the next.

Finally, the end of the shielding series must be connected inside the control panel cabinet at the point indicated for connecting the shields to earth.

## PROGRAMMING PARAMETERS

The operating mode of the acoustic device integrated in the TFBASE-SOUNDER is defined by the programming of two parameters associated with the detector: the operating criterion and the management formula.

### Operating criterion

The operating criterion defines who or what triggers the silencing of the TFBASE-SOUNDER.




With the "Acknowledgeable or Siren" option, the control panel "ACK" command silences the TFBASE-SOUNDER alarm.

With the "Not acknowledgeable" option, the control panel "RESET" command silences the alarm of the TFBASE-SOUNDER.

### Management formula

The formula defines who or what causes the TFBASE-SOUNDER to be activated.

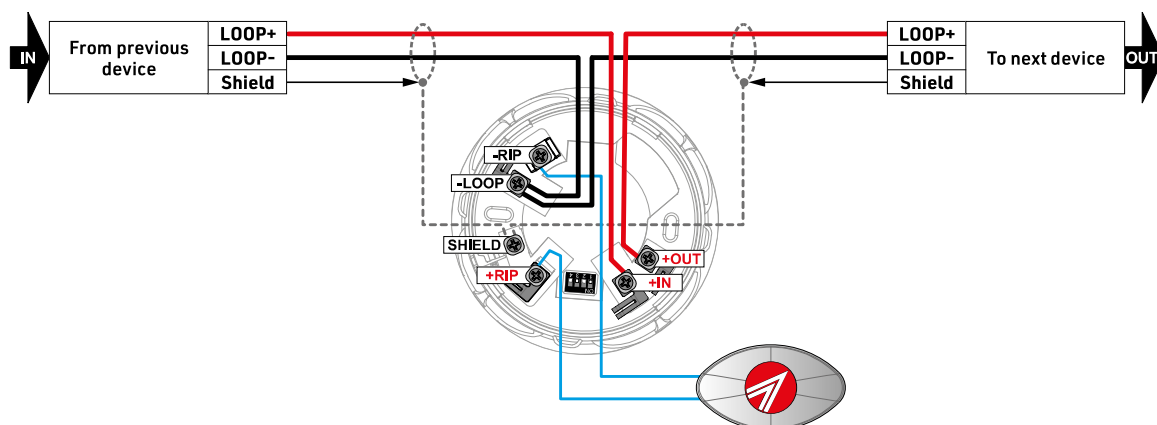
### EXAMPLES OF MANAGEMENT FORMULAS

Loop (Lx) Detector (Sx)	Management formula associated with the TFBASE-SOUNDER	TFBASE-SOUNDER in alarm if
	L1S1 - Formula xx aL1S1   aL1S2   aL1S3	Alarm of L1S1 or Alarm of L1S2 or Alarm of L1S3
	L1S2 - Formula xy aL1S1	Alarm of L1S1
	L1S3 - Formula xy aL1S3	Alarm of L1S3

## TFBASE-SOUNDER TEST

The 'Sensor Function Test' menu contains the 'Activate' function which allows the TFBASE-SOUNDER function test to be started. When the function is activated, the TFBASE-SOUNDER activates an audible signal which remains active until the function is deactivated.









## CONNECTION TO THE LOOP



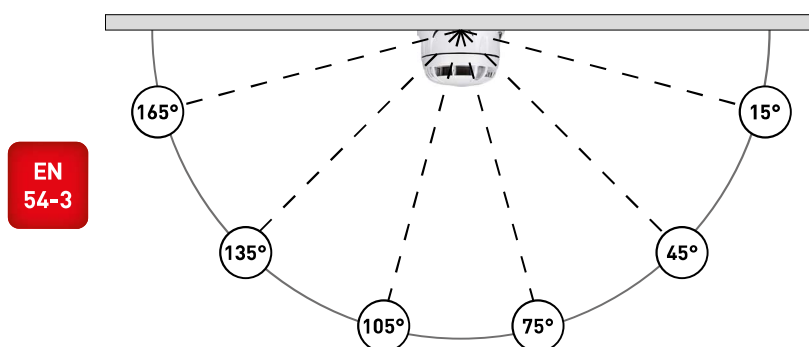
## SOUND MODES

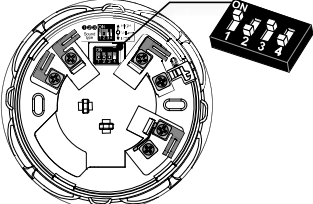
The table shows the characteristics of each of the 8 available sound modes: description, frequency and development of the sound, conformity to standards, sound levels measured at the angles indicated in the emission plan and maximum sound level with 30V DC power supply.

The last column of the table shows the programming of dip-switches 1, 2 and 3 for each sound mode. Dip-switch 4 can be used to adjust the acoustic intensity of the signal by programming the volume to high or low.

Mode	Description	Development	Standard	Sound level dB @21V DC High volume						Maximum sound level @30V DC	DIP-SWITCH		
				15°	45°	75°	105°	135°	165°		1	2	3
1	TECNOFIRE Alarm	Sweep (353Hz...1950Hz) in 1000ms + OFF x 50ms	 Tono di default	78	78	79	80	79	77	80	OFF	OFF	OFF
2	TECNOFIRE Technical alarm	Sweep (445Hz...590Hz) in 1000ms + OFF x 50ms		78	76	78	77	76	74	79	ON	OFF	OFF
3	DIN & PFEER Evacuation tone	1200Hz...500Hz in 1000ms + 10ms off	 DIN PFEER	79	76	76	76	76	77	83	OFF	ON	OFF
4	Prealarm TECNOFIRE (4 pulse tones)	ON 1050Hz x 100ms + OFF x 50ms + ON 1300Hz x 200ms + OFF x 50ms + ON 1600Hz x 100ms + OFF x 50ms + ON 1900Hz x 200ms + OFF x 50ms		76	82	81	78	79	77	82	ON	ON	OFF
5	French alarm tone AFNOR	ON 440Hz x 400ms + On 554Hz x 100ms	 NF S 32-001	77	75	76	75	75	73	78	OFF	OFF	ON
6	British standard	ON 800Hz x 500ms + ON 970Hz x 500ms	 BS 5839 Pt1	75	78	78	79	78	73	80	ON	OFF	ON
7	Prealarm signalling UNI 11744	Sweep (800Hz...970Hz) in 1000ms + 0ms OFF	 UNI 11744 BS5839 Pt1	79	74	73	72	72	75	83	OFF	ON	ON
8	Evacuation alarm signalling UNI 11744	Continuous tone 970Hz	 UNI 11744 BS5839 Pt1	72	65	65	71	68	73	78	ON	ON	ON
Sound level dB @21V DC		Notes - Sound modes 7 and 8 comply with UNI 11744 (April 2019) and are available from Firmware version 1.7. The sound levels were measured at the angles indicated, at a distance of 1 metre, with the High Dip4 volume control set to On and the unit powered at 21V. With the volume control set to Low sound volume, a maximum attenuation of 3dB is obtained. The attenuation varies according to the sound mode and emission angle.											

## SOUND POWER DETECTION ANGLES

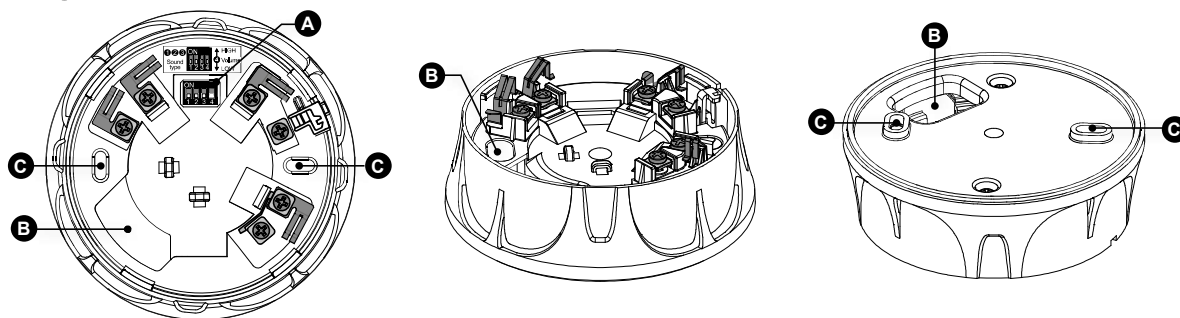


DIP-SWITCH PROGRAMMING			
	Dip 1	Programming the sound mode: the three Dip switches operate in combinatorial logic and their position determines the sound mode. For sound mode programming, please refer to the "SOUND MODES" table.	
	Dip 2		
	Dip 3		
	Dip 4	ON Sound volume: high (maximum intensity)	OFF Sound volume low (minimum intensity)

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## INSTALLATION



<b>A</b>	Sound type and volume programming dip	<b>B</b>	Hole for cable routing	<b>C</b>	Mounting holes
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## Accessories

	<b>TFRIP-R</b> Optical repeater, red LED. 360° visibility. Surface mounting. ABS casing. IP22. White colour. Dimensions (L x H x D) 78 x 45 x 25mm. <b>Item no. TF3TFRIPR</b>		<b>TFRIP-SMART</b> Smart optical repeater, red LED. 360° visibility. Formula-managed signaling. 3 wire connection to detector. ABS casing. IP22. Colour white. Dimensions (W x H x D) 78 x 45 x 25mm. <b>Item no. TF3TFRIPSMART</b>
			<b>TFRIP-R INC</b> Optical repeater, red LED. 360° visibility. Flush mounting. Protection rating IP67. <b>Item no. TF3TFRIPRINC</b>

## Technical and functional specifications

<b>General information</b>	Base with acoustic signalling device	<b>TFBASE-SOUNDER</b>
	Area of use	<b>Type A (for indoors)</b>
<b>Acoustic characteristics</b>	Sound level	<b>Max. 81dB(A) @ 1m</b>
	Main sound frequency (compliant with EN 54-3)	<b>Number 8</b>
<b>Programmable functions</b>	Functioning criterions	<b>3 modes</b>
	Acoustic signalling modes	<b>8</b>
	Acoustic volume adjustment	<b>2 settings</b>
	Device activation	<b>It can be controlled by the formula</b>
<b>Electrical specifications</b>	Power supply	<b>Over Loop</b>
	Nominal voltage	<b>24V DC</b>
	Operating voltage	<b>21V...30V DC</b>
	Consumption in stand-by	<b>120µA @ 24V DC</b>
	Maximum absorption in signalling	<b>Low volume 2,5mA @ 24V DC</b> <b>High volume 3,5mA @ 24V DC</b>
<b>Physical specifications</b>	Operating temperature	<b>-15°C...+70°C</b>
	Relative humidity (non-condensing)	<b>10%...93%</b>
	Protection class	<b>IP22 (EN 60529)</b>
	Casing	<b>PC V0</b>
	Dimension (D x H)	<b>108 x 35mm</b>
	Weight	<b>87g</b>
<b>Conformity</b>	Standards	<b>EN 54-3:2001 +A1:2002 +A2:2006</b>
	System compatibility	<b>UNI EN 54-13:2020</b>
	Certification number	<b>1293-CPR-0558</b>
	Year of CE marking	<b>17</b>
	Number of declaration of performance	<b>022_TFBASE-SOUNDER</b>
	Notified body	<b>EVPU</b>
The TFBASE-SOUNDER meets EN 54-3 and EN 60529 requirements only when used in conjunction with a mounted detector		

N.B. Declarations of conformity and performance are available on [www.tecnofire.com](http://www.tecnofire.com)



The product features can be subject to change without notice.