

Industrial sounders



The industrial sounders PA 5 and PA 10-SSM are universally applicable acoustical devices for fire alarm and security technology, IP 66, 24 VDC, EN 54-3 compliant.

Certifications and approvals

Region	Regulatory compliance/quality marks	
Germany	VdS	G212115 PA 5
	VdS	G212192 PA 10-SSM
Europe	CE	PA 5
	CE	PA 10-SSM
	CPD	0786-CPD-21182 PA 5
	CPD	0786-CPD-21224 PA 10-SSM
Poland	CNBOP	2848/2017 PA 10-SSM

Installation/configuration notes

- Use the Bosch Safety Systems Designer for reliable planning.

Industrial sounder SSM, high

- Mounting options: wall, ceiling
- Wall mounting depending on background noise: 8,3 m
- Ceiling mounting depending on background noise: 23,2 m

Industrial sounder, low

- Mounting options: wall, ceiling

- ▶ Certified according to EN 54-3, type B
- ▶ High efficiency and good penetration of acoustic obstacles significantly reduce the number of sounders required
- ▶ High protection class ideally for industry applications

- Wall mounting depending on background noise: 7 m
- Ceiling mounting depending on background noise: 18,1 m

Technical specifications

Electrical

	PA 10-SSM Industrial sounder SSM, high
Current consumption (mA)	60 mA – 485 mA
Operating voltage (VDC)	18 VDC – 30 VDC
Maximum DIN tone current consumption at 24 VDC	282 mA
Inrush current reduction	SSM module

	PA 5 Industrial sounder, low
Current consumption (mA)	6 mA – 80 mA
Operating voltage (VDC)	10 VDC – 57 VDC
Maximum DIN tone current consumption at 24 VDC	38 mA

Acoustic

	PA 10-SSM Industrial sounder SSM, high
Maximum sound pressure level at a distance of 1 m (dBA)	117 dBA

	PA 10-SSM Industrial sounder SSM, high
Maximum DIN tone sound pressure level at a distance of 1 m (dBA)	115 dBA
Volume control	-10 dBA
Tones	80
Tone levels externally	4

	PA 5 Industrial sounder, low
Maximum sound pressure level at a distance of 1 m (dBA)	107 dBA
Maximum DIN tone sound pressure level at a distance of 1 m (dBA)	105 dBA
Volume control	-12 dBA
Tones	80
Tone levels externally	4

Environmental

	PA 10-SSM Industrial sounder SSM, high
Operating temperature (°C)	-40 °C – 55 °C
Operating relative humidity, non-condensing (%)	0% – 90%
Degree of protection (IEC 60529)	IP66
Degree of protection (EN 50102)	IK08

	PA 5 Industrial sounder, low
Operating temperature (°C)	-40 °C – 55 °C
Operating relative humidity, non-condensing (%)	0% – 90%
Degree of protection (IEC 60529)	IP66
Degree of protection (EN 50102)	IK08

Mechanical



















	PA 10-SSM Industrial sounder SSM, high
Material	Plastic
Color	Red



















	PA 10-SSM Industrial sounder SSM, high
Dimension (H x W x D) (mm)	170 mm x 214 mm x 156.20 mm

	PA 5 Industrial sounder, low
Material	Plastic
Color	Red
Dimension (H x W x D) (mm)	135 mm x 163.40 mm x 132 mm

Tone tables			
No.	Tone type	Sound pattern	Frequency/modulation
1	No tone		
2	Sawtooth, DIN tone 33404-3 Germany (emergency signal), PFEER PTAP (EN 54-3)		500-1200 Hz/1 s
9	Slow whoop, fire alarm, UK BS5839-1		800-970 Hz/1 s
11	Interrupted tone (fast)		800-970 Hz/20 ms
13	Interrupted tone		700-900 Hz/0,3 s on/0,6 s off
15	Slow whoop, evacuation alarm Netherlands NEN 2575 (EN 54-3)		500-1200 Hz/3,5 s on, 0,5 s off
16	Slow whoop, evacuation alarm Australia AS2220		500-1200 Hz/3,75 s on/0,25 s off
18	Slow whoop, NFPA		422-775 Hz/0,85 s on/1 s off
22	Pulsating tone, Australien alert AS1670, ISO8201		500-1200 Hz/0,5 s on/off x 3/1,5 s off
23	Siren		500-2400 Hz/3 s rising, then constant
24	Siren		300-1200 Hz/3 s rising, then constant
25	Siren		300-800 Hz/3 s rising, then constant
26	Siren, industrial alarm Germany		150-1000 Hz/10 s rising, then 40 s constant, then 10 s falling
27	Sweeping		2400-2900 Hz/0,5 s
29	Sweeping (fast)		2400-2900 Hz/10 ms
30	Sweeping		2400-2900 Hz/70 ms
31	Sweeping, France NFC48_265		1400-1600 Hz/1 s rising, 0,5 s falling
33	Sweeping (medium), UK BS5839-1		800-1000 Hz/0,5 s
34	Sweeping (fast)		800-1000 Hz/10 ms

Tone tables			
No.	Tone type	Sound pattern	Frequency/modulation
35	Sweeping (fast), UK BS5839-1		800-1000 Hz/70 ms
36	Sweeping		700-1500 Hz/1,5 s
43	Sweeping		500-1200 Hz/1,5 s
44	Sweeping, IMO 3d, Germany KTA3901 evacuation alarm		500-1200 Hz/1 s
45	Sweeping		500-1200 Hz/3 s
46	Sweeping, general alarm Finland		500-1500 Hz/7 s
52	Continuous tone		2400 Hz
53	Continuous tone		2000 Hz
54	Continuous tone, Finland (all-clear signal)		1500 Hz
55	Continuous tone, PFEER gas alarm		1200 Hz
56	Continuous tone		1000 Hz
57	Continuous tone, UK BS5839-1		950 Hz
59	Continuous tone		880 Hz
60	Continuous tone (EN 54-3)		825 Hz
61	Continuous tone		800 Hz
63	Continuous tone		725 Hz
65	Continuous tone, Sweden SS031711 (all-clear signal)		660 Hz
66	Continuous tone		554 Hz
67	Continuous tone, Germany KTA3901 (all-clear signal)		500 Hz
68	Continuous tone		470 Hz
69	Continuous tone		440 Hz
71	Continuous tone		340 Hz

Tone tables			
No.	Tone type	Sound pattern	Frequency/modulation
77	Interrupted tone		2200 Hz/0,5 s on/off
82	Interrupted tone, PFEER (general alarm), UK BS5839-1 (back-up alarm)		1000 Hz/0,5 s on/off
83	Interrupted tone, PFEER (general alarm)		1000 Hz/1 s on/off
88	Interrupted tone		950 Hz/1 s on/off
90	Interrupted tone		825 Hz/0,5 s on/off
91	Interrupted tone		800 Hz/0,25 s on/off
92	Interrupted tone		800 Hz/0,25 s on/1 s off
93	Interrupted tone (fast), Horn		800 Hz/4 ms on/off
97	Interrupted tone		725 Hz/0,7 s on/0,3 s off
98	Interrupted tone, Sweden SS031711 (emergency signal)		700 Hz/0,125 s on/off
100	Interrupted tone, industrial alarm Germany		680 Hz/0,875 s on/off
101	Interrupted tone, Sweden SS031711 (important message (pre-mess))		660 Hz/6,5 s on/13 s off
102	Interrupted tone, Sweden SS031711 (local warning)		660 Hz/0,5 s on/off
103	Interrupted tone, Sweden SS031711 (air raid warning)		660 Hz/1,8 s on/off
104	Interrupted tone, Sweden SS031711 (emergency signal) (EN 54-3)		660 Hz/150 ms on/off
107	Interrupted tone, Germany KTA3901 (evacuation alarm)		500 Hz/0,25 s on/0,75 s off
109	Interrupted tone, Australia AS2220, AS1610, AS1670		420 Hz/0,625 s on/off
110	Interrupted tone, (fast variable), bell		1450 Hz/0,69 s on/off

Tone tables			
No.	Tone type	Sound pattern	Frequency/modulation
111	Interrupted tone, ISO8201 (emergency evacuation signal), USA (evacuation alarm)		470 Hz/0,5 s on/off x 3/1,5 s off
112	Interrupted tone, ISO8201 (emergency evacuation signal)		950 Hz/0,5 s on/off x 3/1,5 s off
113	Interrupted tone, ISO8201 (emergency evacuation signal), sweeping		2850 Hz/0,5 s on/off x 3/1,5 s off
115	Interrupted tone, IMO (telephone call)		950 Hz/2 s on/0,5 s off/0,5 s on/1 s off
116	Interrupted tone, IMO (leave ship)		950 Hz/1 s on/off/3 s on/1 s off
117	Interrupted tone IMO SOLAS III/50 + SOLAS III/6.4 (general alarm)		825 Hz/2,5 s on/off x 6/7 s on
122	Alternating tone		2400s-2900 Hz/0,5 s
123	Alternating tone		2400s -2900 Hz/0,25 s
124	Alternating tone, Singapore		1000-2900 Hz/0,5 s
125	Alternating tone		1200-1400 Hz/20 ms
128	Alternating tone		825-1025 Hz/0,25 s
130	Alternating tone, UK BS5839-1 (fire alarm)		800-1000 Hz/0,5 s
131	Alternating tone, UK BS5839-1 (fire alarm, railway crossing)		800-1000 Hz/0,25 s
135	Alternating tone, UK BS5839-1 (fire alarm, increased urgency - railway crossing)		800-1000 Hz/0,125 s
142	Alternating tone		500-900 Hz/0,25 s
143	Alternating tone, industrial alarm Germany		440-660 Hz/0,125 s
144	Alternating tone		440-650 Hz/1 s
146	Alternating tone, France NFS 32-001 (fire alarm) (EN 54-3)		440-554 Hz/0,1 s/0,4 s

Tone tables			
No.	Tone type	Sound pattern	Frequency/modulation
147	Alternating tone, Sweden SS031711		440-554 Hz/1 s
148	Alternating tone, Sweden SS031711		440-554 Hz/0,5 s
152	Alternating tone (two tone chime)		800-650 Hz/0,25 s on/off x 2/2 s off

Control of the tones									
DIP-Switch (Setting of basic tone)						External tone selection			
1	2	3	4	5	6	Basic tone	C1	C2	C1 + C2
						Tone number			
						1	2	88	57
On						2	128	112	57
	On					2	26	100	93
On	On					2	61	131	112
		On				9	57	11	82
On		On				15	131	52	112
	On	On				16	109	52	56
On	On	On				18	111	57	68
			On			22	16	109	68
On		On				23	131	52	112
	On	On				24	131	52	131
On	On	On				25	131	52	92
		On	On			26	2	100	93
On		On	On			27	123	52	92
	On	On				29	35	52	61
On	On	On				30	27	52	77
			On			31	131	52	57
On			On			33	30	52	35
	On		On			34	35	52	93
On	On		On			35	27	52	110

Control of the tones									
DIP-Switch (Setting of basic tone)						External tone selection			
1	2	3	4	5	6	Basic tone	C1	C2	C1 + C2
						Tone number			
		On		On		36	146	67	57
On		On		On		43	131	52	91
	On	On		On		45	2	57	93
On	On	On		On		52	15	65	82
			On	On		54	46	54	131
On			On	On		55	131	52	128
	On		On	On		56	82	35	33
On	On		On	On		59	143	59	101
			On	On		60	131	52	125
On		On	On	On		65	131	52	93
	On	On	On	On		66	110	52	107
On	On	On	On	On		69	131	52	110
				On		71	131	52	93
On				On		77	61	52	122
	On			On		82	131	52	83
On	On			On		83	56	2	82
		On		On		88	2	57	128
On		On		On		90	131	52	125
	On	On		On		91	30	52	110
On	On	On		On		92	33	52	57
			On	On		93	2	128	57
On			On	On		97	2	63	93
	On		On	On		100	131	52	125
On	On		On	On		101	98	102	65
		On	On	On		103	131	65	147
On		On	On	On		104	103	65	101
	On	On	On	On		109	16	52	22

Control of the tones									
DIP-Switch (Setting of basic tone)						External tone selection			
1	2	3	4	5	6	Basic tone	C1	C2	C1 + C2
							Tone number		
On	On	On	On		On	110	131	61	91
				On	On	112	2	57	128
On				On	On	113	52	123	104
	On			On	On	115	117	116	44
On	On			On	On	116	117	93	125
		On		On	On	117	93	116	125
On		On		On	On	123	27	52	77
	On	On		On	On	124	53	83	2
On	On	On		On	On	130	2	107	67
			On	On	On	131	2	112	57
On			On	On	On	135	16	56	109
	On		On	On	On	142	2	54	88
On	On		On	On	On	143	59	93	33
		On	On	On	On	144	110	61	2
On		On	On	On	On	146	31	67	57
	On	On	On	On	On	148	131	52	92
On	On	On	On	On	On	152	110	61	13

Ordering information

PA 10-SSM Industrial sounder SSM, high

Universally applicable acoustical signalling for fire alarm and security technology, 117 dBA, IP 66, 24 VDC, EN 54-3 compliant.

Order number **PA 10-SSM | F.01U.393.222** Asset Key **5740** Vepos **9442**

PA 5 Industrial sounder, low

Universally applicable acoustical signalling for fire alarm and security technology, 107 dBA, IP 66, 24 VDC, EN 54-3 compliant.

Order number **PA 5 | F.01U.393.223** Asset Key **5740** Vepos **9443**

Represented by:

Europe, Middle East, Africa:
 Bosch Security Systems B.V.
 P.O. Box 80002
 5600 JB Eindhoven, The Netherlands
 Phone: + 31 40 2577 284
 emea.securitysystems@bosch.com
 emea.boschsecurity.com

Germany:
 Bosch Sicherheitssysteme GmbH
 Robert-Bosch-Ring 5
 85630 Grasbrunn
 Germany
 www.boschsecurity.com

North America:
 Bosch Security Systems, LLC
 130 Perinton Parkway
 Fairport, New York, 14450, USA
 Phone: +1 800 289 0096
 Fax: +1 585 223 9180
 onlinehelp@us.bosch.com
 www.boschsecurity.us

Asia-Pacific:
 Robert Bosch (SEA) Pte Ltd, Security Systems
 11 Bishan Street 21
 Singapore 573943
 Phone: +65 6571 2808
 Fax: +65 6571 2699
 apr.securitysystems@bosch.com
 www.boschsecurity.asia