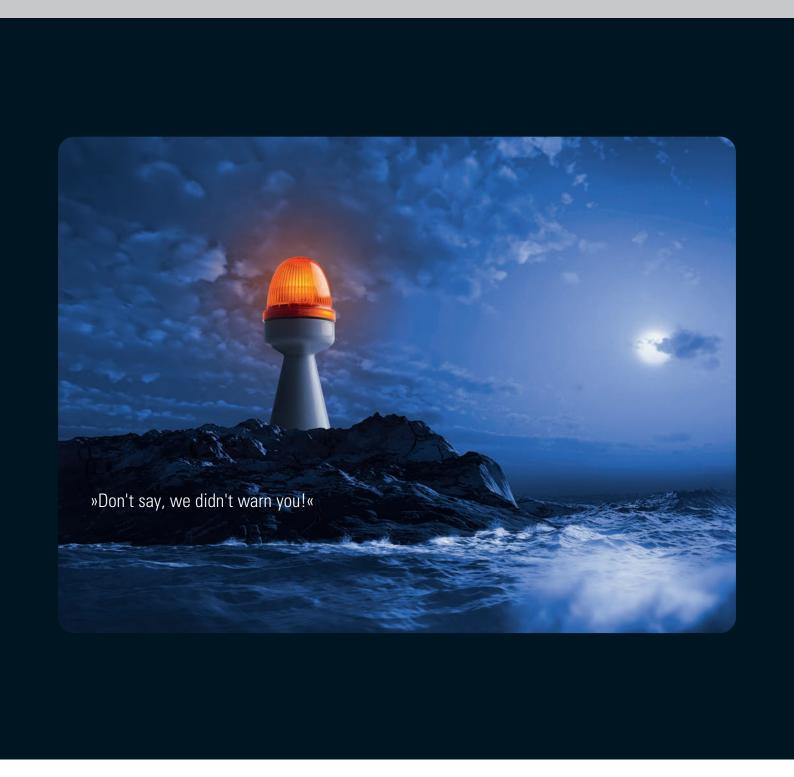
# Sound devices — Bells / Buzzers / Horns

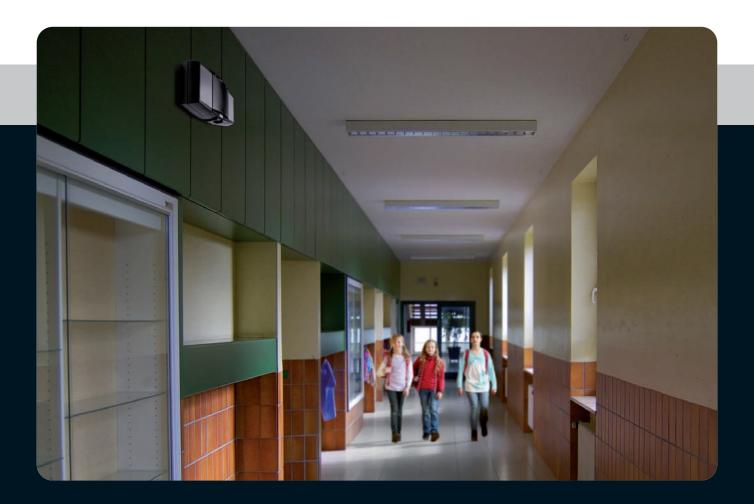


## Sound devices — Bells / Buzzers / Horns

# The choice is yours: the classic bell for domestic use or the professional version for industrial and commercial use!

A friendly welcome signal for visitors or a warning signal for enhanced security. GROTHE signal systems turn heads! Guaranteed! And when sheer volume is no longer enough — then it's a job for the PSG 4.0, whose ultra-bright LED flashing beacon is impossible to oversee.

## Power Sound Generator 4.0



- High volume generated by the double pressure chamber loud speaker system
- o Power-boost to 115 dB(A)
- Industrial, commercial or domestic use universal.
- Table, wall or ceiling mounting (30°/60° angle)

Universally used sounder with a very high volume, many distinct signal tones and outstanding installation flexibility, for both indoor and outdoor use (e. g. schools, airports, industrial premises, public buildings, etc). The PSG can be attached to suit your requirements: Mount directly to a wall, tables or ceiling using the accessories available. Various angles of radius can also be set to suit.

No need to worry about wiring or device variants either! The PGS 230 can do everything: Supply with either 12–24 AC/DC or 230 V AC, activation with the same voltages or potential free or criss-cross (see the installation manual for the possible options).



Table, wall or ceiling mounting (30°/60° angle)



Double pressure chamber loud speaker system (up to 115 dB(A)

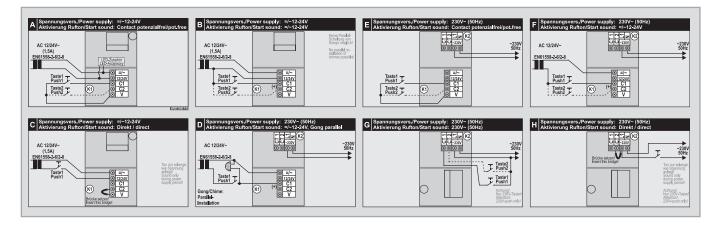
Programmable tone development

#### Power sounder PSG 4.0

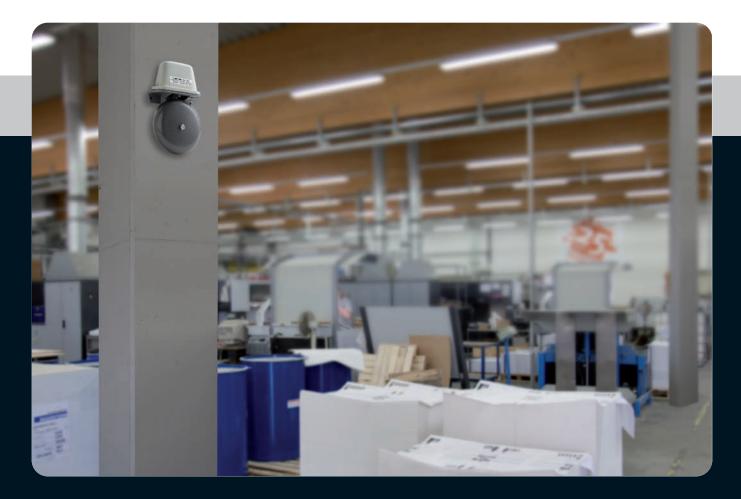
Model Order no. Description				
PSG 4.0-100	37410	Power sounder • Wiring options A, B, C	• incl. LED flashing light • 12–24 V AC/DC (1.0 A)	
PSG 4.0-230F	37430	Power sounder Incl. LED flashing light Wiring options A, B, C, D, E, F, G, H	• 230 V AC (0.1 A), 12–24 V AC/DC (1.0 A	



#### PSG – Circuit overview



# Bells



- o High volume
- o Robust design
- o Proven technology

The mechanical bells from Grothe are characterised by their excellent sound quality. The advantage in residential applications, when compared with the classical two-tone bell, is that the sound generation continues as the bell button is pressed.

In industrial applications, the bells come into their own as danger warnings or as break signals.

Appropriate warning signals for industrial use are regulated according to international and domestic safety laws and installation is compulsory. Grothe alarm bell systems act as warnings in case of hazard where the health or safety of the worker is affected.



#### Signaller SG 851



Universal-use flush-mounted signaller with electronic alpha tone in modern installation device design

#### **Product features**

- Electronic alpha tone with subdued volume
- White plastic housing

#### Installation

- Flush-mounted installation (expander claw fastening or screw fastening in flush-mounting boxes)
- Parallel connection of several signallers possible

• Parallel connection to electromechanical chimes with the same rated voltage possible

#### **Technical data**

- Approx. 70 dB(A)
- For voltage variants, see ordering overview
- Degree of protection IP20
- Temperature range +5°C to 40°C
- 80 x 80 x 48 mm
- Duty cycle 100%

Model	Order no.	Description	
SG 851 8-12V AC	24012	Signaller	
			• 8–12 V AC / 50 Hz (0.45 VA)
SG 851 230V AC	24017	Signaller	
			• 230 V AC / 50 Hz (0.90 VA)

## Flush-type bell mechanism LTW / buzzer SU 120 / 230



Model	Order no.	Description	
UP-LTW 120 ws	43711	Flush-type bell mechanism	
		Small bell	• 8-12V AC (0.320A)
		• up to 80 db(A)	• 80 x 80 x 40 mm
		incl. mounting plate & frame	<ul><li>Colour: white</li></ul>
UP-LTW 230 ws	43716	Flush-type bell mechanism	
		• as 43711	<ul> <li>but: 230V AC , 50Hz / 0.045</li> </ul>
UP-SU 120 ws	43721	Flush-type buzzer	
		Small bell	• 8-12V AC / 0.210 A
		• up to 80 db(A)	• 80 x 80 x 40 mm
		• incl. mounting plate & frame	<ul><li>Colour: white</li></ul>
UP-SU 230 ws	43726	Flush-type buzzer	
		• as 43721	<ul> <li>but: 230V AC , 50Hz / 0.036 A</li> </ul>

## Buzzer SU 1170A / Trumpf bell LTW 1171A



#### **Product features**

- White
- Flush-mounted installation

#### Technical data

- Max. 85 dB(A)
- Short-term load max. 10 s (KB 10 s)
- 99 x 62 x 28 mm

Model	Order no.	Description	
SU 1170A 8-12V	24052	Buzzer • Reed-type buzzer with adjustable volume	• 8–12 V AC / 0.37 A
LTW 1171A 8V AC	24081	Bell mechanism	
			• 8 V AC / 0.83 A
LTW 1171A 12V AC	24082	Bell mechanism	
			• 12 V AC / 0.38 A
LTW 1171A 24V AC	24083	Bell mechanism	
			• 24 V AC / 0.17 A

#### Circular bell LTW 101A



#### **Product features**

- White plastic base
- Elegant tone shell

- 85 dB(A)
- 8 V AC (0.86 A)
- Short-term load 10 s (KB 10 s)
- Shell diameter 70 mm
- 80 x 75 x 30 mm

Model	Order no.	Description
LTW 101A 8V AC	24071	Circular bell  • 8 V AC (0.86 A)

#### Record bell LTW 1101A

#### **Product features**

- · White plastic housing
- Contents of packaging: 2 items (price quotation per item)

#### Technical data

- 84 dB(A)
- 8 V AC (0.86 A)
- Short-term load 10 s (KB 10 s)
- Shell diameter 70 mm
- 114 x 70 x 30 mm

Model	Order no.	Description	PU
LTW 1101A 8V AC	24075	Small bell	2
		• 8 V AC(0.86 A)	



#### Colonia bell LTW 4471A

#### **Product features**

- · White plastic housing
- Contents of packaging: 2 items (price quotation per item)
- Flat shell

#### **Technical data**

- 80 dB(A)
- 8 V AC (1.0 A)
- Short-term load 10 s (KB 10 s)
- Shell diameter 70 mm
- 150 x 70 x 30 mm

	Model	Order no.	Description	PU
ı	LTW 4471A 8V AC	24111	Small bell	
ı			• 8 V AC(1.0 A)	2



#### Colonia bell LTW 4477A

#### **Product features**

- · White plastic casing
- Contents of packaging: 2 items (price quotation per item)

#### Technical data

- 8 12V AC (AC)
- 0,08 0,12 A
- Shell diameter 70 mm

Model	Order no.	Description	
LTW 4477A 8V AC	24113	Small bell • Small-shell	• 85 dB(A) • 148 x 70 x 80 mm



## Dome bell LTW 3371A

#### Product features

- White plastic housing
- Cover with screw fastening
- Double coil
- ÖVE-tested

#### **Technical data**

- 85 dB(A)
- 230 V AC (6 mA)
- Continuous operation
- 150 x 70 x 35 mm
- Shell diameter 70 mm

Model	Order no.	Description		PU
LTW 3371A 230V AC	24091	Small bell	• 230 V AC (6 mA)	2



#### SOS alarm bell LTW 911A

#### **Product features**

- White plastic housing
- With watertight diaphragm-type grommet for cable insertion
- Tone shell made of painted steel

- 98 dB(A)
- Short-term load 10 s (KB 10 s)
- 210 x 100 x 51 mm
- Shell diameter 100 mm
- Degree of protection IP54

Model	Order no.	Description	
LTW 911A 8V AC F	24311	Bell	
			• 8 V (0.6 A)
LTW 911A 24V AC	24331	Bell	
			• 24 V (0.23 A)
LTW 911A 230V AC	24376	Bell	
		With fine-wire fuse (0.05 A)	• 230 V (0.025 A)



#### Large bells LTW 742 / 754



#### **Product features**

- Light-grey, impact-resistant, plastic housing
- With watertight diaphragm-type grommet for cable insertion
- Tone shell made of powder-coated cast steel, hammer finish

#### **Technical data**

- Degree of protection IP54 (outdoor use)
- 105 dB(A)
- 260 x 155 x 100 mm
- Shell diameter 150 mm
- Fastening hole spacing 136 mm

Model	Order no.	Description	
LTW 742 12V AC	22512	Large bell  Continuous operation	• 12 V AC (1.2 A)
LTW 742 24V AC	22513		• 12 V AC (1.2 A)
LIVV 742 24V AG	22313	Large bell  • Continuous operation	• 24 V AC (0.6 A)
LTW 742 42V AC	22514	Large bell	- 24 1 110 (0.0 11)
LI 11 742 421 710	22314	Continuous operation	• 42 V AC (0.5 A)
LTW 742 230V AC	22517	Large bell	
		Continuous operation	• 230 V AC (0.05 A)
		VDE-tested	• 50 Hz
LTW 754 12V/DC	22540	Large bell	
		<ul> <li>Not suitable for installation in new automobiles (from year of manufacture 2002) (for technical authorisation purposes, not suitable for vehicles manufactured from 2002 on)</li> <li>Intermittent operation 5/5 min</li> </ul>	• 12 V= (1.0 A)
LTW 754 24V/DC	22541	Not suitable for installation in new automobiles (from year of manufacture 2002) (for technical authorisation purposes, not suitable for vehicles manufactured from 2002 on)     Intermittent operation 5/5 min	• 24 V= (0.9 A)

#### Large bells LTW 781 / 793



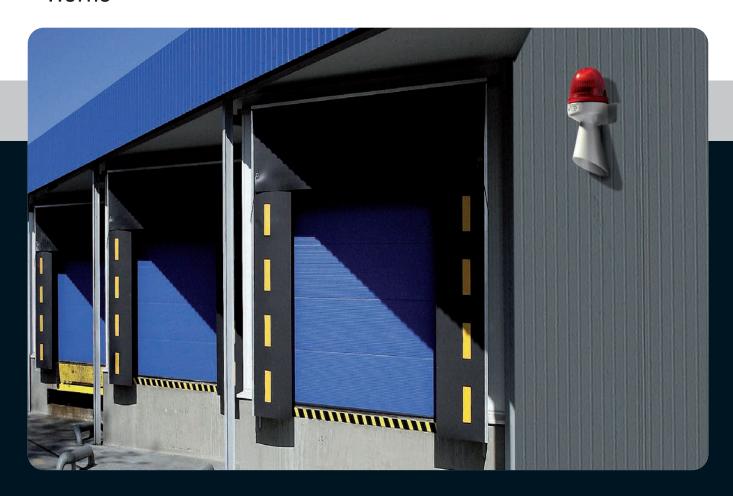
#### **Product features**

- Light-grey impact-resistant plastic cover
- Sturdy cast steel housing
- With watertight diaphragm-type grommet for cable insertion
- Tone shell made of powder-coated cast steel, hammer finish

- Degree of protection IP54 (outdoor use)
- DIN VDE 0700 / EN 60335-tested
- 110 dB(A)
- 360 x 250 x 110 mm
- Shell diameter 250 mm
- Fastening hole spacing 132 mm

Model	Order no.	Description	
LTW 781 230V AC	22557	Large bell Continuous operation	• 230 V AC (0.05 A) • 50 Hz
LTW 793 12V/DC	22580	Not suitable for installation in new automobiles (from year of manufacture 2002) (for technical authorisation purposes, not suitable for vehicles manufactured from 2002 on)     Intermittent operation 5/5 min	• 12 V= (1.0 A)
LTW 793 24V/DC	22581	Large bell  Not suitable for installation in new automobiles (from year of manufacture 2002) (for technical authorisation purposes, not suitable for vehicles manufactured from 2002 on) Intermittent operation 5/5 min	• 24 V= (0.9 A)

## Horns



- Compact high volume horns for indoor and outdoor use
- Volume of up to 100 dB(A)
- o Industrial, commercial or domestic use
- o Combihorn with integrated warning light

Due to an electromechanical sound produced through a membrane, horns are the ideal devices for warning signal for use in industry, as alarm systems or fire protection technology. Using a funnel for optimal sound focusing, Grothe horns can achieve up to 100 dB(A).

Also available in the programme is the so-called combi-horn, which not only emits an acoustic signal, but also a visual signal.



#### Horn 63x



#### Compact horn with high volume for indoors and outdoors

#### **Product features**

- Electromechanical sound generation with a steel diaphragm
- With bell mouth for optimum sound concentration
- Sturdy light-grey plastic housing (ABS, self-extinguishing)

#### Installation

- Wall mounting (with bell mouth facing down)
- Terminals for max. 1.5 mm<sup>2</sup>

#### **Technical data**

- Duty cycle 100%
- Degree of protection IP43, protection class II
- -30°C to +50°C
- 168 x 79 x 74
- Weight 0.2 kg

Model	Order no.	Description	
For alternating curren	t (AC)		
HORN 630 8V AC	31041	Horn	
			• 8 V DC (0.34 A), 92 dB(A)
HORN 630 24V AC	31043	Horn	
			• 24 V AC (0.14 A), 93 dB(A)
HORN 630 110V AC	31045	Horn	
			• 110 V AC (0.06 A) 95 dB(A)
HORN 630 240V AC	31047	Horn	
			• 240 V AC (0.03 A), 95 dB(A)
For direct current (DC)	)		
HORN 631 12/24 V DC	31053	Horn	• 12 V DC (0.05 A), 90 dB(A)
			• 24 V DC (0.14 A), 92 dB(A

#### Horn WL 63xx



# Compact horn with high volume and an additional visual signaller for indoors and outdoors

#### **Product features**

- Electromechanical sound generation with a steel diaphragm
- With integrated warning light
- Orange lens made of impact-resistant polycarbonate PC (red lens as accessory 31101)
- Duration of optic / acoustic signals as long as voltage applied (use an additional relay if required); operation of the optical signal independently of the acoustic signal possible
- With bell mouth for optimum sound concentration
- Sturdy light-grey plastic housing (ABS, self-extinguishing)

#### Installation

- Wall mounting (with bell mouth facing down)
- Terminals for max. 1.5 mm<sup>2</sup>

- Duty cycle 100%
- Incl. 5W bulb for Ba15d socket
- Degree of protection IP43, protection class II
- -30 °C to +50°C
- 204 x 79 x 76
- Weight 0.25 kg
- Important: Please order LED-lamps seperately

Model	Order no.	Description	
HORN WL 6301 240V AC	31371	Combi horn	
			• 240 V AC (0.06 A), 92 dB(A)
HORN WL 6311 24V DC	31341	Combi horn	
			• 24 V DC (0.25 A), 96 dB(A)
Accessories/Spare part	ts		
KSZ 8596	38596	Bulb	
		<ul> <li>For Ba15d socket</li> </ul>	• 24 V (5 W)
KSZ 8597	38597	Bulb	
		<ul> <li>For Ba15d socket</li> </ul>	• 240 V (5 W)
KSZ OR 100	31101	Lens	
		• Red	

LED light				
for 24 V AC/DC				
KSZ-LED 8661	38661	LED light	Yellow-orange	24 V AC/DC (45 mA)
KSZ-LED 8662	38662	LED light	Red	24 V AC/DC (45 mA)
for 240 V AC	-			
KSZ-LED 8651	38651	LED light	Yellow-orange	230-240 V AC (50 mA)
KSZ-LED 8652	38652	LED light	Red	230-240 V AC (50 mA)

#### Horn BZ 63xx

Compact horn with high volume and an additional visual signaller for indoors and outdoors

#### **Product features**

- High warning effect thanks to xenon flash tube (included in scope of delivery)
- Orange lens made of impact-resistant polycarbonate PC (red lens as accessory 31101)
- High failure safety of the optical signaller as there are no moved parts
- Field of application: industrial hazard areas/alarm systems
- Electromechanical sound generation with a steel diaphragm
- Duration of optical/acoustic signals as long as voltage applied (use an additional relay if required); operation of the optical signal only possible together with acoustic signal

- With bell mouth for optimum sound concentration
- Sturdy light-grey plastic housing (ABS, self-extinguishing)

#### Installation

- Wall mounting (with bell mouth facing down)
- Terminals for max. 1.5 mm<sup>2</sup>

#### Technical data

- Duty cycle 100%
- Replaceable xenon tube 2 j
- Flash frequency: dual flash, 2x65 flashes/min.
- Degree of protection IP43, protection class II
- −30 °C to +40 °C
- 204 x 79 x 76
- Weight 0.25 kg

Model	Order no.	Description	
HORN BZ 6301 240 V AC	31271	Combi horn	
			• 240 V AC (0.05 A)
			• 92 dB(A)
HORN BZ 6311 24 V DC	31241	Combi horn	
			• 24 V DC (0.65 A)
			• 96 dB(A)
Accessories / Spare par	rts		
KSZ OR 100	31101	Lens	
		• Red	



#### Horn 640 / 651

#### **Product features**

- White impact-resistant plastic housing, with bell mouth
- With watertight diaphragm-type grommet for cable insertion

#### **Technical data**

- 100 dB(A)
- 345 x 150 x 165 mm
- Degree of protection IP54 (outdoor use)
- -10 °C to +50 °C

Model	Order no.	Description	
HORN 640 12 V AC	32012	Large horn	
		Continuous operation	• 12 V AC (2.2 A)
HORN 640 24 V AC	32013	Large horn	
		Continuous operation	• 24 V AC (1.1 A)
HORN 640 230 V AC	32017	Large horn	
		Continuous operation DIN 0700-tested	• 230 V AC, 50 Hz (0.15 A)
HORN 651 24 V DC	32123	Large horn	04.1/. D0 /0 4.4.1
		Continuous operation 5/5 min	• 24 V DC (0.4 A)



#### Horn 680

#### **Product features**

- Light-metal housing with grey hammer finish
- Suppressed
- With bell mouth
- With watertight diaphragm-type grommet for cable insertion

- 230 V AC (0.15 A)
- 50 Hz (60 Hz on request)
- 100 dB(A)
- Continuous operation
- Degree of protection IP54 (outdoor use)
- DIN VDE 0700 / EN 60335-tested
- 440 x 140 x 160 mm
- $\bullet$  -10 °C to +50 °C

HORN 680 230V AC	33017	Large horn	
Model	Order no.	Description	

