

Models

	Waterproof IP54 with suitable hole pattern	Internal loudspeaker	External loudspeaker or Inductive loop	Microphone	Internal emerg. button Normally open NO	Emergency button connectable	Remote controlled EC-button connectable	DC/DC supply of alarm unit	Yellow light	Green light	Integrated LEDs	meets EN 81-70	Opto-coupler input Alarm-signal (10..50V) Sensor 3 (IN)	Additional output i.e. "help is coming"
EA-LMC-EC	-	✓	-	✓	✓	-	-	-	-	-	-	-	-	-
EA-LMK	-	✓	-	✓	-	✓	-	-	-	-	-	-	-	-
EA-LMC70	-	✓	-	✓	-	✓	-	✓	✓	✓	✓	✓	-	-
EA-LMK70C	-	✓	-	✓	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
EA-LMK70C-WG	✓	✓	-	✓	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
EA-LMK70T	-	✓	✓	✓	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
EA-LMK70T-WG	✓	✓	✓	✓	-	✓	✓	✓	✓	✓	✓	✓	✓	✓

① incl. adjustable power amplifier if powered with VIN higher volume for noisy surrounding.

② incl. adjustable power amplifier for external inductive loop (hearing aid) or exciter see last page.

Connections

Plug X7 (free potential)

PIN	Description	Specification	Function
1	VIN(-)	8 .. 35 VDC	Supply voltage e.g. from emergency light
2,3	VIN(+) isolated by diodes	Max. 400 mA (12 V) Max. 220 mA (24 V)	Standby EA-8-DPX, EA-8-DPXN: 70 mA (12 V) / 40 mA (24 V) Standby EA-8-DPXM: 95 mA (12 V) / 55 mA (24 V)
5	Lamp(+)	8 .. 35 VDC	for Lamp1 and Lamp2
4	Lamp1(-)	Open Collector-outputs (- is switching contact)	Yellow light: activated when call is set up.
6	Lamp2(-)	max. 300mA /output 1100mA in total (fuse)	Green light „Speak“ => activated by command [DTMF 1] .
7	ECTest(-)	Output-voltage=VIN	Output for remote controlled emergency button => is activated during periodical test => i.e. Schäfer MT42 remote control! => if so the internal Test-relay must be deactivated by open marking INT inside LMK-housing!!
8	LMK-OUT(-)		Remote switch: i.e. to connect EasyAlarm to external control system or to activate "help is coming"-lamp
9	S3 (IN)	Opto coupler-input 10..50V (AC or DC)	Technical alarm => „Alarm due to Sensor 3“

Plug X2 (on Ⓞ-potential)

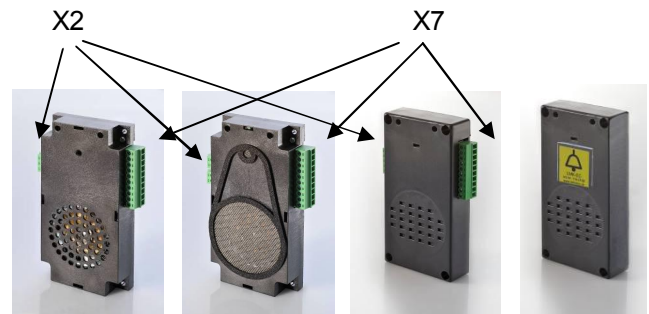
PIN	LMK..	LMC70	Specification
1	Contact NO	EC	on Ⓞ-potential
2	Contact C	EC	on Ⓞ-potential
3	Contact NC	-	on Ⓞ-potential

EA-LMK70T only

4	External speaker/Loop	on Ⓞ-potential
5	External speaker/Loop	on Ⓞ-potential

EXT-Jack (on Ⓞ-potential)

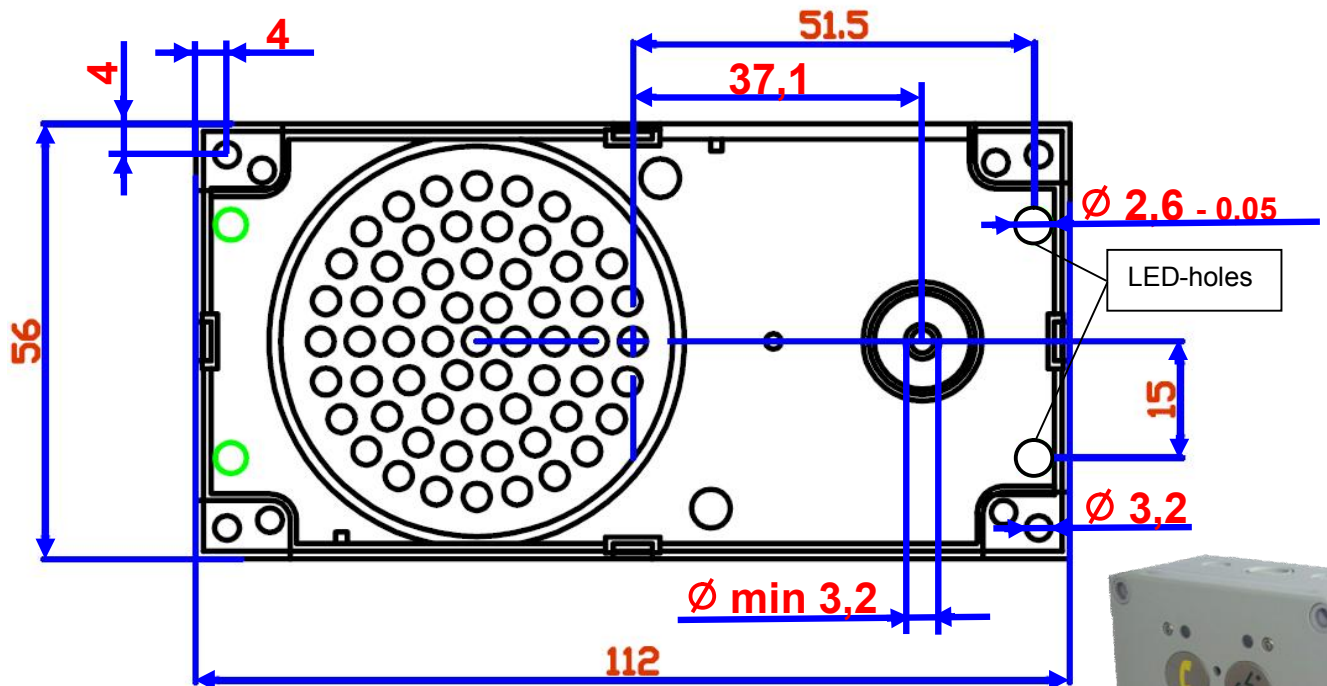
PIN	Description	Specification
1	LS+	on Ⓞ-potential
2	OUT	on Ⓞ-potential
3	Emergency contact	on Ⓞ-potential
4	+12V	on Ⓞ-potential
5	Sensor 1	on Ⓞ-potential
6	GND	on Ⓞ-potential
7	Sensor 3	on Ⓞ-potential
8	MIC+	on Ⓞ-potential



LMK70C 118.0160 LMK70C-WG 118.0161 LMC70 118.0155 LMC-EC 118.0158

LMK70T 118.0165 LMK70T-WG 118.0166WG **loop interface incl.** **exciter incl.**

Mechanical



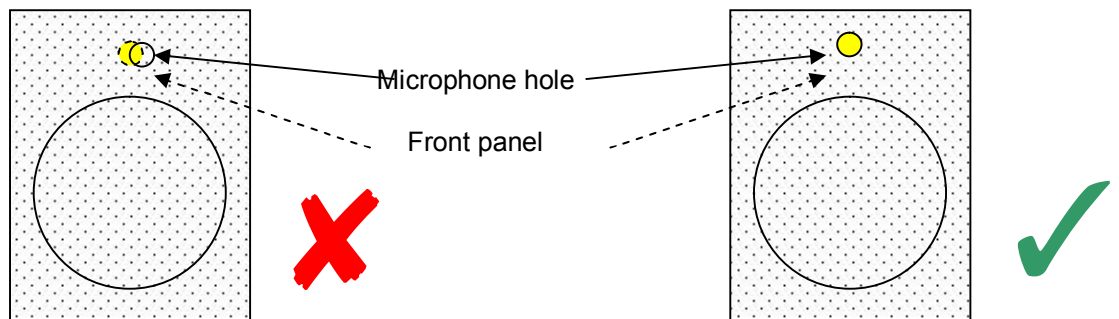
Material:	ABS	
Size without plugs:	LMK, LMK70C, LMK70T	112 x 56 x 21 mm (L x W x H)
	LMK70C-WG, LMK70T-WG	112 x 56 x 22 mm (L x W x H)
	LMC70, LMC-EC	114 x 58 x 21 mm (L x W x H)
Size incl. plugs:	LMK, LMK70C, LMK70T	112 x 74 x 21 mm (L x W x H)
	LMK70C-WG, LMK70T-WG	112 x 74 x 22 mm (L x W x H)
	LMC70, LMC-EC	114 x 74 x 21 mm (L x W x H)

IP54-housing suitable for LMK70C, LMK70T, LMC70 incl. RT42 emergency button
 EA-IP-EN70-EC 100.0730 180 x 110 x 64 mm (L x W x H)

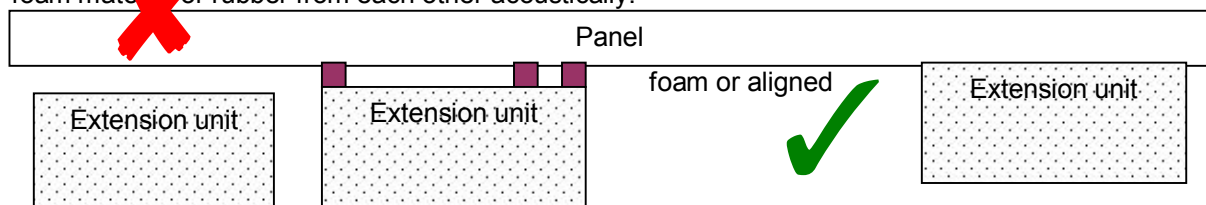
Mounting instruction (acoustic)

If you mount the alarm unit behind a front panel please beware, that the microphone hole is not covered from the panel. Otherwise volume will be reduced and the hands-free balance cannot work properly!

- The loudspeaker and in particular the microphone must not be covered, because otherwise the communication quality is poor (→ reduced volume / bad switching characteristics).
- Please check that if you mount behind a front plate that the microphone hole is adjusted.



- The extension unit must be placed **directly behind** the panel and mounted **without gap** because otherwise you get unwanted feedback. Isolate if necessary the loudspeaker area and/or the microphone area with foam material or rubber from each other acoustically.



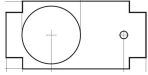
Hole patterns for tableaux

Propositions for hole patterns by Schäfer GmbH including their reference. Detailed drawings on request.

Optional: Light pipes (order code: PGN 25145) can be used to show the integrated LEDs ● ●: Drill holes $\varnothing=2.6$ -0.05mm

SNEL Upgrade set (order code: 100.0277), consisting of

Adhesive foil to mount EA-LMx



Adhesive Symbol

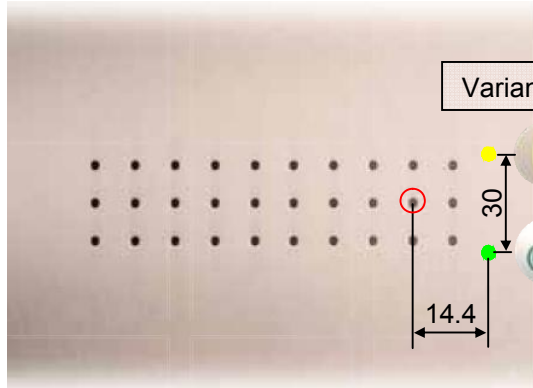


Light pipes PGN25145

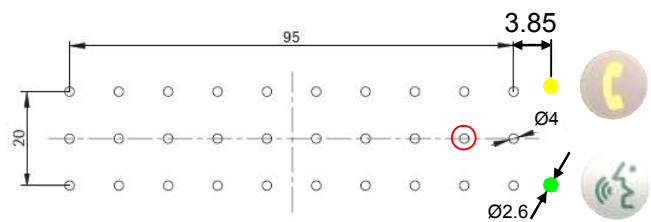


Variant 1: order code „G9924“

Variant 2: order code „G9924 LMx70-LED“with holes for light guides and engraving or adhesive symbol

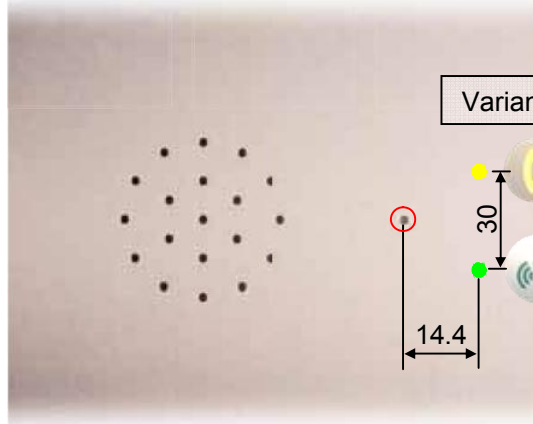


Variante 2

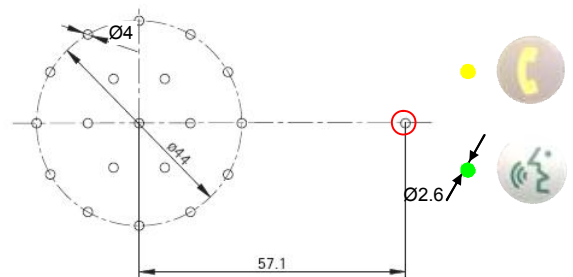


Variant 1: order code „G9924wg“: waterproof IP54 with Option -WG

Variant 2: order code „G9924wg LMx70-LED“with holes for light guides and engraving or adhesive symbol

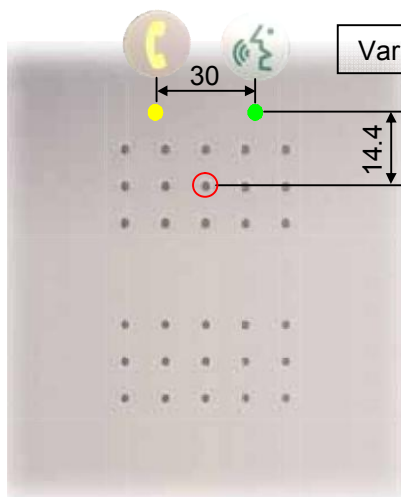


Variante 2

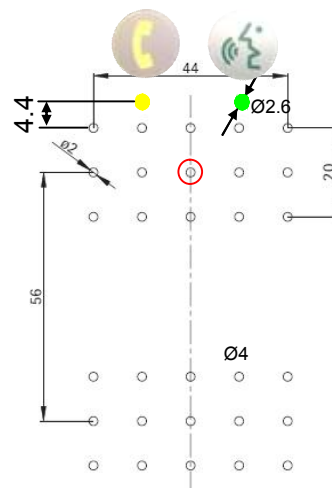


Variant 1: order code „G4824“

Variant 2: order code „G4824 LMx70-LED“with holes for light guides and engraving or adhesive symbol



Variante 2



Special programming

The interface EA-LMK70 can be used in different ways. You can adjust it to your needs by programming in the alarm unit as following.

Lamp1/Lamp2 according to EN81-70 (Standard)

To activate the yellow and green lamp according to EN81-70 you need an EasyAlarm with Software revision from V66.21 (Serial-No>40'000)

OFF <input type="checkbox"/> ON PROG	* 9 7 1 3 6 9 # #	Value	*	Value	#	OFF <input type="checkbox"/> ON PROG
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Value	Comment
0	Yellow and green lamp/LED disabled.
2	Green lamp/LED must be activated manually during connection using DTMF 1 (=factory setting).
4	Green lamp/LED will be activated after dialling

Output LMK-OUT(-)

To activate "help is coming"-lamp you need an EasyAlarm with Software >= 8.32 (Serial-Nr. >57'100)

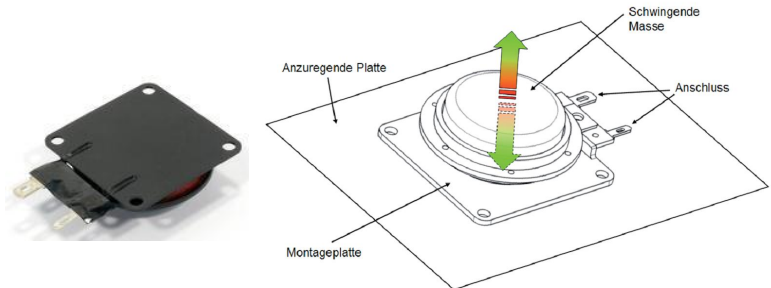
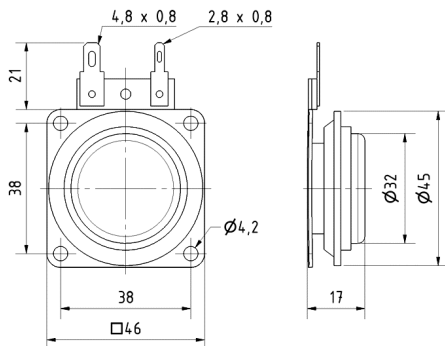
OFF <input type="checkbox"/> ON PROG	* 9 7 1 3 3 7 # #	Value	*	Value	#	OFF <input type="checkbox"/> ON PROG
---	--------------------------	-------	---	-------	---	---

Value	Comment
208	Lamp „Help is coming“ Activate „Help is coming“ by pressing DTMF 6 during connection. Switched off, when: <ul style="list-style-type: none"> ➤ when there is a change in door signal (S1) ➤ if the alarm remains unacknowledged after pressing DTMF 6 (DTMF 8, timeout or busy tone) ➤ if there is a new alarm (i.e. emergency button pressed again) ➤ after a periodical test! ➤ by pressing DTMF 4 during connection
193	Output „Emergency call active“ => Connection to external system The output „Emergency call active“ is active after misuse protection timeout. Switched off, when <ul style="list-style-type: none"> ➤ there is a change in door signal (S1) ➤ there is a new alarm (i.e. emergency button pressed again) ➤ after a periodical test! ➤ pressing DTMF 4 during connection

Exciter

The body of the exciter is mounted to the surface of the plate (glass, wood, panel) either by screws or adhesive tape. It can be used for any application where an invisible design is needed (i.e. glass) or special protection from the elements (i.e. water) or vandalism.

Dimension:



Compared to a conventional loudspeaker with membrane the efficiency of the transducer speaker is lower and must be compensated using an additional audio amplifier, i.e. the adjustable audio amplifier of LMK70T => X2 terminal on pin 4 & 5

Set: Article-No: 118.0166

Beware: The connections must be wired floating as the audio output is on telephone potential.