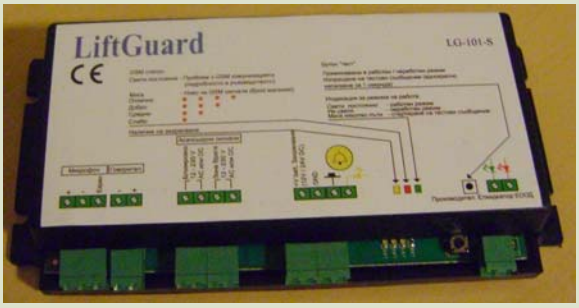
LiftGuard LG-101-S Lift Alarm

Features

- Easy to install & use
- Up to three service phone numbers programmed
- Calls to / from the three programmed phone numbers
- Sends SMS messages for alarm events and lift troubles and their restores
- Handles lift signals: Safety Chain, Door Zone
- Handles battery power status
- Filters false alarms
- Sends periodic message (in 72 hours)
- Uses external antenna
- Meets EN 81-28 standard

Description

The device provides monitoring and reporting of lift alarm events. It establishes two-way voice communication between a trapped passenger and the service company.
The communication with the service company is done via embedded GSM module.
It can be installed in passenger or good passenger lifts



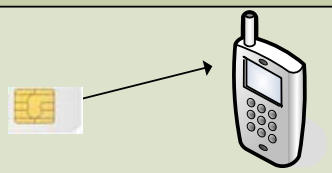
Functionality

The device establishes two-way voice communication between a trapped passenger and the service company by pressing the call button in the lift's car. The communication can not be dropped by the passenger, but by the service personnel only. It can be reestablished multiple times from both sides as far as the lift is in alarm condition.
The device reports alarm events via SMS messages:
- Lift is blocked;
- Battery low etc (Appendix A: The list of SMS messages)
It sends SMS message when alarm event has been restored (Appendix A: The list of SMS messages).
When alarm condition does not exist voice communication cannot be established.
Allows SMS test message to be sent to verify the operational status of the device and allows End Of Alarm message to be sent, as EN 81-28 requires.
The device sends period SMS messages in every 72 hours with information of the current status of the lift
It supports two operation modes – active and inactive
In inactive mode it does not send alarm SMS messages, does not allow voice communication, it sends 72 hours periodic message and allows test message to be sent. This mode is suitable when the lift is in maintenance or repair
In active mode, the basic mode, the device sends alarm and periodic messages and allows voice communication in alarm condition.
The device supports communication with up to three service phone numbers; they can be programmed and changed by the service personnel. It allows incoming calls from these three phone numbers only, calls from other numbers are rejected.
It is powered by lift's emergency battery.
The communication unit of the device and the external antenna are meant to be installed on top of the car; the microphone, the speaker and call button - on the car's control panel.

Installation

Setting Service Telephone Numbers

Insert the SIM card the device is going to use, into a mobile phone



⚠ The SIM card has to be set not to require PIN code

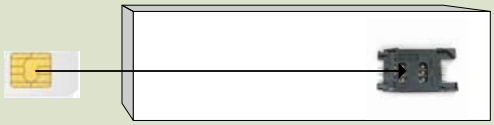
Program phone book / contacts with the service phone numbers

ⓘ The programming of the phone numbers could do done in international format +xxxxxxxxxxx or in format 0xxxxxxxxx

ⓘ The order of programming of phone numbers matters: the device tries to connect to the first phone. if it fails – to the second, if it fails again - to the third

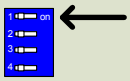
⚠ It has to be set phone numbers / contacts to be written into SIM card, not into mobile phone memory

Insert the SIM card into device and it is going to start using programmed phone numbers



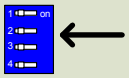
⚠ When plugging SIM card make sure the device is powered off, otherwise SIM card could be damaged

Modes of operation and settings



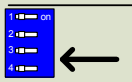
Switch 1

Via the first switch SW1-1 the polarity of Door Zone / Station Zone can be chosen.
When Off is active high level of the signal, when on - low level



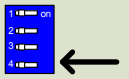
Switch 2

Via switch SW1-2 the mode of the filter of false alarms can be chosen
When Off the emergency voice connection is allowed in cases
- Door can not be opened when lift is in door zone / station
- If the lift is strapped / stopped between floors / stations.
When it is On - connection is allowed
- If lift does not move for more than 2 minutes



Switch 3

Via the third switch SW1-3 the polarity of Blocking / Safety chain can be chosen.
When Off is active low level of the signal, when on - high level

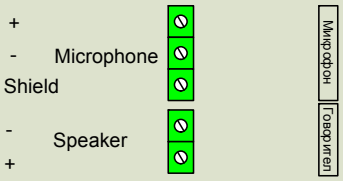


Switch 4

Via the forth switch SW1-4 could be set the volume of the speaker.
When Off the volume is normal, when on - the volume is higher (suitable for lift with bigger cars / cabins)

Electrical Installation

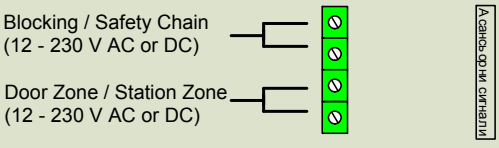
The power supply and signal cables have to be connected according to the scheme in the right or to the label located on the top of the device



⚠ Electrical installation has to be done by qualified personnel

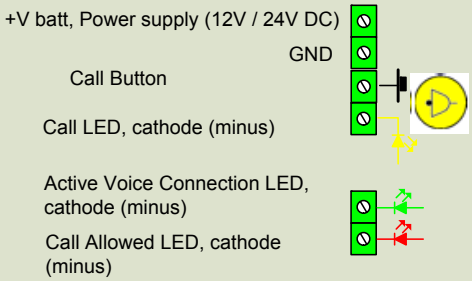
⚠ During the electrical installation the whole system has to be powered off

ⓘ When the device is powered the yellow LED is lighted. Standards EN 81-1 и EN 81-2 т.14.2.3.2 require the power to be supplied by emergency light power supply or similar power supply device (12V / 24V DC)



⚠ Input signals Safety Chain and Door Zone have to be in the range 12 – 230 V AC or DC

ⓘ The other end of Call Button could be connected to ground or to power supply +V batt



ⓘ The anodes (pluses) of the indicators / pictogram LEDs have to connected to +V batt

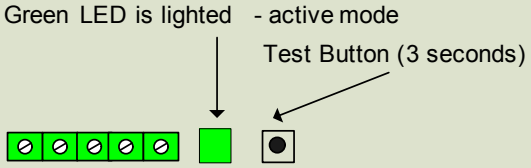
ⓘ According to standard the Call indicator / pictogram LEDs have to be yellow; for the Active Voice Connection - green

ⓘ Indicator in red that call is allowed is not mandatory (could be left not connected)

Device Operation

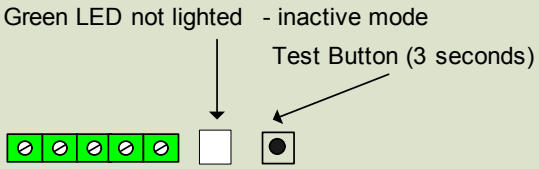
Device Activation

To activate the device press Test Button till green LED turns on / Is lighted (approximately 3 seconds)



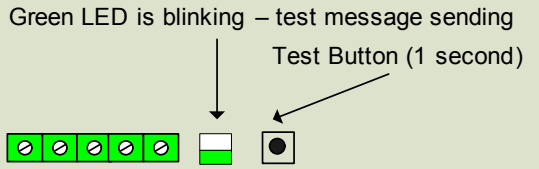
Device Inactivation

To inactivate the device: press Test Button till green LED turns off / Is lighted off (approximately 3 seconds)



Send Test Message / End Of Alarm Notification

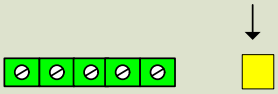
To send test SMS message press Test Button for approximately 1 second, un-pressed it , green LED will blink several times to indicate sending has started



LEDs Indication

Yellow LED

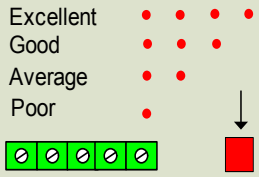
Yellow LED lighted: Device is powered



Red LED

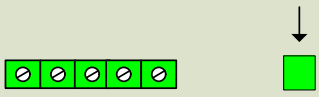
Red LED lighted: GSM commutation problems :
- No coverage or mobile service
- No SIM card is plugged
- SIM card is set to require PIN code
- There is not at least one service phone number programmed

Red LED blinking: GSM signal level (number of blinks):



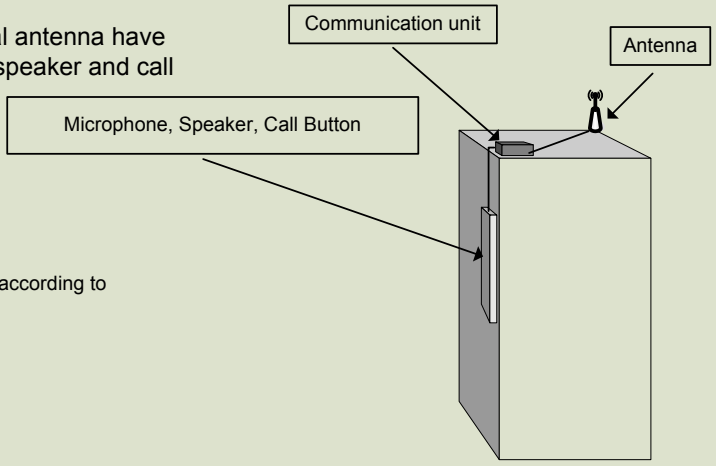
Green LED

Green LED lighted: – active mode
Green LED not lighted: – inactive mode
Green LED blinking: – test message started



Mechanical Installation

The communication unit of the device and the external antenna have to be installed on top of the car The microphone, the speaker and call button have to be installed on the car's control panel



⚠ Microphone, speaker and call button have to be installed according to standards EN 81-70 and EN 81-28

Appendix A: The list of SMS text messages for emergency alarms and their restore the device sends:

Alarm!	Battery power low
Restore	Battery power restore

Appendix B: Technical Highlights

- Power Supply:	12V DC
- Power consumption during voice connection mode:	1.80W
- Power consumption in idle mode:	0.25W
- Input signal Safety Chain:	from 12 to 230V AC or DC
- Input signal Door Zone:	from 12 to 230V AC or DC
- Mass:	0.195 gr
- Size:	200x100x30 mm (without antenna)
- Operational Temperature Range :	from -20°C to +60°C
- Storage Temperature Range :	from -40°C to +85°C
- Enclosure:	Plastic

Appendix C: Kit Parts

- Communication Unit:	1 piece
- Antenna (with cable 3m):	1 piece
- Microphone (with cable 2m):	1 piece
- Speaker (with cable 2m):	1 piece
- Screws:	4 pieces
- Guide	1 piece

The guaranty of the product: 24 months, starting from the day of purchase

The guaranty could be refused in cases of maintenance not according to the technical guide

Serial Number:

IMEI:

CE

Manufactured by Electro Thermal ltd, Bulgaria

web: http://liftguard.net/lg101s.php e-mail: info@liftguard.net