

SIGNALING EQUIPMENT FOR SPECIAL MOTOR VEHICLES



CATALOG

2019



ABOUT US







Founded in 1991, ELINA Industrial Company has been engaged in developing and manufacturing the signaling equipment for special motor vehicles since 1994. In accordance with modern requirements of the world market, company's specialists have developed a broad product range in demand among consumers not only in Russia, but also in the neighboring countries.

ELINA Industrial Company possesses an intellectual and technical potential for developing and manufacturing special equipment for emergency services, which enables a continuous improvement of the existing product range with a focus on customer needs and the development of new products in accordance with the company's innovation principles of operation. ELINA is the country's leading innovative company in the industry to date. In addition, international integration has become an important principle of operation in the context of market globalization. The existing intellectual production potential enables us not only to merely grow and develop, but to develop the signaling equipment industry in the country. It may be no accident that company has chosen In the Service of the Fatherland! as its slogan. It is not easy to protect order on the roads of the country when the technical means available to traffic offenders surpass the capacity of the law enforcement bodies. That is why an active development of the safety industry is becoming a matter of state importance.

Company clients include divisions of the Ministry of Interior, Emercom, Ministry of Defense, and other ministries and departments as well as special motor vehicle manufacturers. A network of representative offices is created and over 40 dealers are present in various cities of Russia, Ukraine, Belarus, Kazakhstan, Uzbekistan, Lithuania. A close work with specialists of law enforcement agencies enables not only necessary product testing, but also improvement and development of modern plants matching the nature of service.

Reliability, high quality and operability in various climatic conditions are the basic qualities that the equipment of special services should possess. It is exactly these qualities that make ELINA products so popular on the market of special equipment. ELINA products are certified and meet state and industry standards.

Company certification per Gost ISO 9001-2015 (ISO 9001:2008) has become an additional guarantee of high product quality, too. The company management has decided not only to make products meet international quality standards, but also to develop partnership relations of a new level. The certificate of conformity to standard ISO received in 2005 was once again successfully confirmed in 2017. The certified QMS in place in the company is also an important factor affecting the selection of partners for cooperation in the entire world. ELINA is a company focusing on international cooperation and is a reliable partner trusted by customers and valued and respected by partners.

The company regularly participates in various federal and regional programs to ensure a high product quality. Given the public importance and the need to ensure a high level of quality and competitiveness of Russian products and services, the ELINA management and staff have undertaken the obligation to ensure quality indicator stability and to maintain the high level of product consumer characteristics.







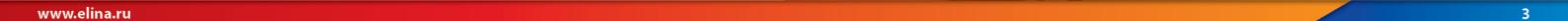
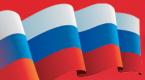


TABLE OF CONTENTS



	About the company	
	LIGHTBARS WITH INTEGRATES SIREN SPEAKER LED flasher/mechanical drive ERMAK lightbar	
	SIREN SYSTEM SMERCH siren system	
<u>\</u>	LIGHTBARS LED flasher/mechanical drive FORVARD	
<u> </u>	BEACONS LED flasher/mechanical drive TSEFEI-4 20 TSEFEI, MPK 21 BLIK, SIGNAL 22 SPEKTR, AGENT 23	
<u>\</u>	PULSE LED DEVICE (flashing headlamps) MAKHAON-4	
1)))	LOUDSPEAKER SPICH	
	PUBLIC ADDRESS SYSTEM GROM	
	INSTALLATIONS FOR AIRPORTS FOLLOW ME 12DT lightbar	
	FASTENERS, HORN LOUDSPEAKERS Fasteners for lightbar and intercoms	
	Our achievements	



LIGHTBARS WITH INTEGRATED SIREN SPEAKER

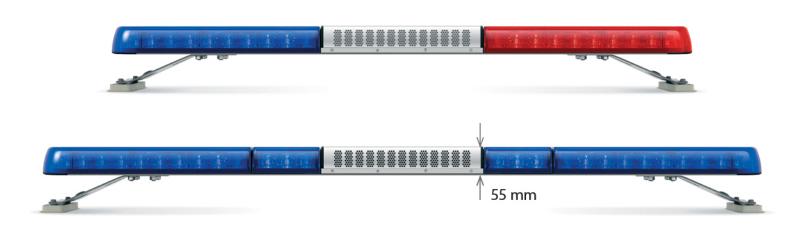




Model series

ERMAK

Lightbars



Purpose

To equip the vehicles used by operational • services, ministries and departments.

Ermak signaling public address units with on OSRAM LEDs LED light sources generate special light and ◆ Long LED life (up to 50 000 h) and vibration sound signals (according to UNECE Regulation No. 65-02 and GOST R 50574-2002) during motor vehicle driving or parking.

Competitive advantages:

- Modern design.
- · High energy efficient optical system, based
- resistence increases service economic effect.
- The roof lights are made of impact-resistant. polycarbonate with an ultraviolet stabilizer added: non-breakable and UV-fast.
- Overall lightbar height is only 55 mm, thats reduces air flow resistance.





Specifications

Model	Overall dimensions [mm]	Weight [kg]
Ermak	$1,102\times303\times55$	12,0
Ermak 2	1,348 × 303 × 55	14,5
Ermak 4	1,594 × 303 × 55	17,0
Ermak 6	1,840 × 303 × 55	19,5



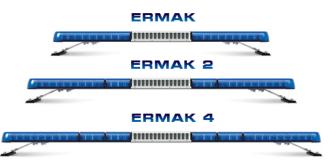
Flasher frequency [Hz]

2-4

Light source LED optical system

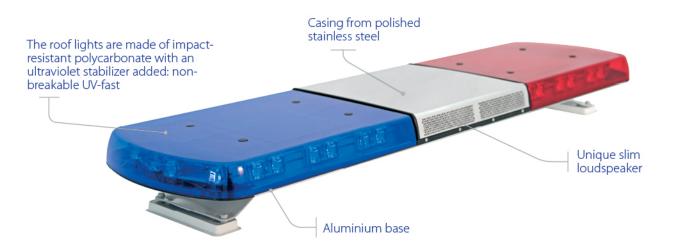
Sound pressure level [dB(A)]

110...125





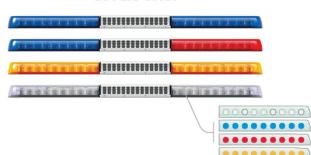
4-button microphone



Types of acoustic signals



Covers color

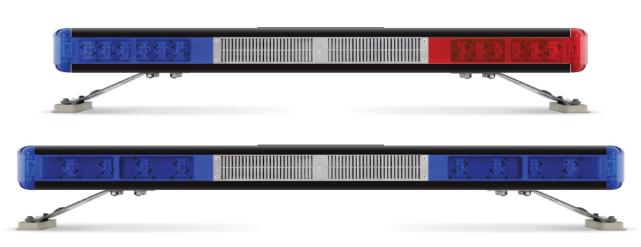






Model series **KOLUMB**

Lightbars



Purpose

To equip operational service vehicles.

Kolumb signaling public address units with LED light sources generate special light and sound signals (according to UNECE Regulation No. 65-02 and GOST R 50574-2002) during motor vehicle driving or parking.

Competitive advantages:

- Modern low-profile Lightbar.
- Powerful LED flasher.
- Long LED service life.
- Sound tract located in the sound-and-light unit.



LED optical system

• 7 light operating modes: Traveling Wave, Forward Only, Backward Only, Forward and Backward, Presence Effect, etc.

Covers color







SMERCH external power unit

- A microphone/manipulator visually designates selected mode, using 8 LEDs simulating the lighbar light flux propagation.
- The unit includes a power unit mounted in any convenient place in the vehicle.

Types of acoustic signals













Specifications

Model	Overall dimensions [mm]	Sound pressure level [dB(A)]
Kolumb 1D	936 × 210 × 79	116124
Kolumb 2D	1,062 × 210 × 79	116124
Kolumb 3D	$1,200\times210\times79$	116124

Power supply	
12 V, 24 V	
Flasher frequency [Hz]	
2—4	
Light source	
LED optical system	









SAPFIR

lightbars





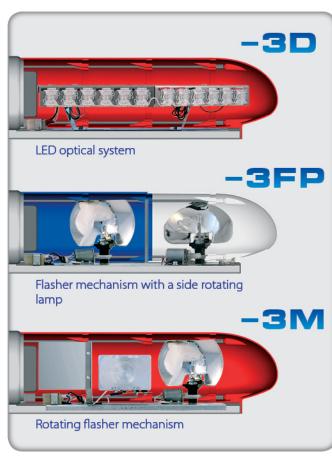
Purpose

To equip the vehicles used by operational services, ministries and departments.

Competitive advantages:

- A broad model series enables equipping a vehicle with a roof of any size.
- The power unit is built in the lightbar to facilitate the installation on the vehicle.
- Presence mode enabling vehicle designation while parked (2M and 3M models).
- Polished stainless steel casing.
- Aluminium base.



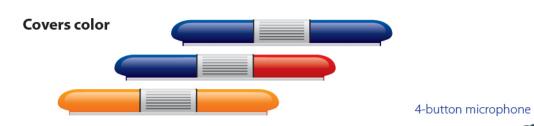


• The roof lights are made of impact-resistant polycarbonate with an ultraviolet stabilizer added: non-breakable UV-fast.





Диплом первой степени лауреата конкурса 20 ЛУЧШИХ ТОВАРОВ ЧЕЛЯБИНСКОЙ ОБЛАСТИ



Types of acoustic signals



Package 1

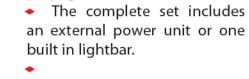






Package 2





propagation.

• A microphone / manipulator

visually designates the selected mode selected using 8 LEDs simulating the lightbar light flux



Built-in power unit

SMERCH external power unit

Specifications

Model	Overall dimensions [mm]	Sound pressure level [dB(A)]
Sapfir 2	$1,012\times300\times150$	110125
Sapfir 3	1,238 × 300 × 150	110125
Topaz 2 – 2 sirens, speakers	1,058 × 300 × 150	110125
Topaz 3	1,118 × 300 × 150	110125

Power supply
12 V, 24 V
Flasher frequency [Hz]
2—4
Light source
Category H1 lamp or LED optical system









SMERCH

Siren system



Purpose

It enables generation of special acoustic and speech signals. It can be used as a signaling device in an alarm (security) system. It is included in the majority of ELINA siren system units.

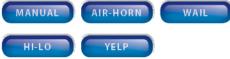
Competitive advantages:

- (in Taifun version)
- ◆ Additional Alarm acoustic signal (in Taifun ◆ Improved unit operation reliability. Increased version)
- Compact power unit body size
- Connectable to flashers to control their operation
- ◆ Two additional signals: Signal 1 and Signal 2 ◆ Full control using a 4-button microphone and remote buttons
 - horn loudspeaker uptime through the use of magnetorheologic suspension in the magnetic circuit gap

SMERCH power unit

Model	Power (Overall dimensions [mm]	Sound pressure level [dB(A)]
Smerch	12 V, 24 V	$152\times160\times50$	110125
Smerch 2 speaker	12 V, 24 V	232 × 160 × 50	110125

Types of acoustic signals





VIP-SIGNAL

acoustic signaling device

(air horn)

FOR INDIVIDUALS



Speakers



Purpose

The VIP-SIGNAL sound unit is designed for general-purpose motor vehicle equipment:

- 1. As an acoustic signaling device
- 2. As an acoustic signaling device in an alarm system

Specifications

The product enables:

- Generation of the basic AIR-HORN 70 Hz acoustic growling low deep tone signal
- Generation of an additional acoustic signal (signal 1)
- Generation of an additional Alarm acoustic signal

Power supply [V]

12, 24

Sound pressure level [dB(A)]

105...118

Overall dimensions [mm]

 $127 \times 54 \times 37$



Type of acoustic signal

ALARM









FORVARD

Lightbars



Purpose

To equip the operational vehicles as well as highway and utility services. Vehicles carrying oversize and hazardous loads, cash collection service vehicles, and federal postal service vehicles.

Competitive advantages:

- The modular roof light arrangement enables the production of many modifications in the model series
- The frame can withstand high bending loads fue to the new profile.

Specifications

Model	Overall dimensions [mm]
Forvard	$798 \times 303 \times 51$
Forvard 1	921 × 303 × 51
Forvard 2	1,044 × 303 × 51
Forvard 3	1,167 × 303 × 51
Forvard 4	1,290 × 303 × 51

Power supply [V]	
12 / 24 (universal)	
Flasher frequency [Hz]	
2—4	
Light source	
LED optical system	

 Versions with transparent color or transparent colorless roof lights are available.



Covers color The use of the Forvard Lightbars with the SMERCH product enables light control through the microphone. Quick-disconnect roof light **LMS** Light mode selector (LMS)

Additional device enabling light mode selection when connected to the Lightbar.

LED optical system









MAGELLAN

Lightbars





Purpose

To equip the special ambulance vehicles, highway services and vehicles carrying hazardous and oversize loads, cash collection service vehicles, and federal postal service vehicles.

Competitive advantages:

- Modern low-profile Lightbar.
- Powerful led flasher.
- Long LED service life.



LED optical system

→ 7 light operating modes: Traveling Wave, Forward Only, Backward Only, Forward and Backward, Presence Effect (Pendulum Wave), etc. on connection to "SMERCH" siren system or use jointly with "LMS" unit.



Covers color





Specifications

Model	Overall dimensions [mm]
Magellan 1D	936 × 210 × 78
Magellan 2D	1,062 × 210 × 78
Magellan 3D	1,200 × 210 × 78

◆ A microphone / manipulator visually designates the selected mode using 8 LEDs simulating the lightbar light flux propagation on connection to SMERCH siren system unit.

Power supply [V]	
12 / 24 (universal)	
Flasher frequency [Hz]	
2—4	
Light source	
LED optical system	

LMS

Light mode selector (LMS)



Additional device enabling light mode selection when connected to the Lightbar.







RUBIN

Lightbars

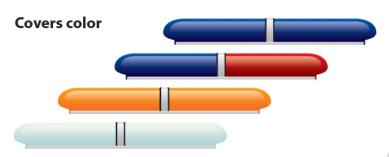




To equip ambulances, highway services, • Aluminium base vehicles carrying oversize and hazardous loads, cash collection service vehicles, and federal postal service vehicles.

Competitive advantages:

- Roof lights made of impact resistant polycarbonate with UV stabilizer added: nonbreakable and UV-fast.
- Polished stainless steel casing
- Operating modes: Forward Only, Backward Only, Forward and Backward.





Specifications

Model	Overall dimensions [mm]
Rubin 3	968 × 300 × 150
Rubin 4	1,194 × 300 × 150

Power supply [V]	
12, 24	
Flasher frequency [Hz]	
2—4	
Light source	
Category H1 lamp, LED optical system	











TSEFEI-4



beacon



Specifications

•				
Model	Overall dimensions [mm]			
Tsefei C	Ø 161 × 80			
Tsefei CU	Ø 161 × 84			
Power supply [V]				
12 / 24 (universal)				
Flasher frequency [Hz]				
2—4				
Light source				
LED optical system				

Purpose

To equip the operational vehicles used by law enforcement agencies, special vehicles used by highway and utility services, and vehicles carrying oversize and hazardous loads.

The flasher overall dimensions are universal for both motor cars and vehicles carrying oversize loads.

 Compact low-profile flash beacon seamlessly blends with the geometry of the motor vehicle.

Rod with DIN-rail attachment for flash beacons (to Cephei foundation)

Purpose

Rod with DIN-rail attachment allows for quick dismantling of the flash beacon, if required, and also quick installation back.





TSEFEI

beacon



Specifications

Model	Overall dimensions [mm]	
Tsefei C	Ø 161 × 144	
Tsefei CU	Ø 161 × 148	
Powe	er supply [V]	
12 / 24 (universal)		
Flasher frequency [Hz]		
2—4		
Light source		
LEDo	ptical system	









- Overall dimensions of the flash beacon are multi-purpose both for passenger cars and oversize vehicles.
- ◆ Three movable magnetic supports enable ◆ Cover quick-disconnect. repeating the vehicle roof contour.
- Magnetic force increased through neodymium flux distribution. magnet polarity reversal in each support.
- The supports are enclosed in rubber holders to prevent flasher slipping and preserve roof coating.
- Lenticular lenses improve the directional light





Flash beacon of economy variant.

MPK

beacon

Specifications		
	Beacon MPK	Overall dimensions [mm]
	Mechanical fastening	Ø 161 × 124

Power supply [V] 12 / 24 (universal) Flasher frequency [Hz] 2-4 Light source LED optical system

21





BLIK beacon

BLIK is effectively used to designate largesize vehicles used by special services in the traffic stream. If used with the Smerch product, it enables light control through a 4-button microphone.

Purpose

To equip the special vehicles used by law enforcement agencies, traffic services and utilities as well as vehicles carrying oversize and hazardous loads.

Specifications

Model	Overall dimensions [mm]
Blik	384 × 210 × 150
Spektr	Ø 180 × 165
Agent	Ø 170 × 124

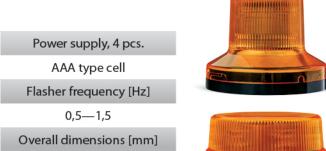
Agent	Ø 170 × 124
	Power supply [V]
	12, 24
	Flasher frequency [Hz]
	2—4
	Light source
	Category H1 lamp, LED optical system







Intended for use on vehicles carrying fire and explosion hazardous loads.



Ø 160×80 ; Ø 160×124



SPEKTR

beacon



The beacon design is in harmony with various vehicle models. Both H1 halogen lamps and super-bright LED optical systems can be used as the light source. The large reflector area of mechanically driven flashers enables generating an increased light flux. LED-based flasher models possess undeniable advantages such as high-power LED flashers and long service life. If used with the Smerch product, it enables light control through a 4-button microphone. SPEKTR is available on a magnetic fastener.











LED optical system

Flashing mechanism



AGENT

beacon

Agent is effectively used to designate the cars used by special services in a traffic stream. If used with the Smerch product, it enables light control through a 4-button microphone, and AGENT magnetic fastener helps transform an ordinary car to an operational one in a short time.















LED optical system

Flashing mechanism

STROBE LED DEVICES (FLASHING HEADLAMPS)





MAKHAON-4

strobe LED device



Madal





Purpose

The item is designed to provide special light signals warning road users about the approach of special vehicles with special traffic priority. MAKHAON-4 is mounted as an additional light signal device on the special transportation means.

The item represents a directed flashing light and is certified for the compliance with the requirements of Technical Regulation TR TS 018/2011 "On wheeled motor vehicles safety", EEC UN regulations No. 65.

Technical characteristics

Flashing frequency, Hz	2–4
Nominal supply voltage, V	12 / 24 (universal)
Protection degree as per GOST 14254	IP53
Climatic design as per GOST 15150	"U"
Operation mode as per GOST R 52230	nominal continuous (S1)

	Model	
	Makhaon-4-3	Makhaon-4-6
LED number	3	6
Maximum consumed current (pulse), A, not more:	0,75	1,5
Average consumed power, W, not more:	8	16
Overall dimensions, mm, not more:	214 x 82 x 40	214 x 82 x 40
Item mass, kg, not more:	0,4	0,6





MAKHAON-3

strobe LED device



Purpose

The item is designed to provide special light signals warning road users about the approach of special vehicles with special traffic priority. MAKHAON-4 is mounted as an additional light signal device on the special transportation means.

The item represents a directed flashing light and is certified for the compliance with the requirements of Technical Regulation TR TS 018/2011 "On wheeled motor vehicles safety", EEC UN regulations No. 65.

Flashing modes

Short single flashes
Long single flashes
Double flashes without pause
Double flashes with pause
Triple flashes without pause
Triple flashes with pause
Demo mode

Technical characteristics

Flashing frequency, Hz	2–4
Nominal supply voltage, V	12 / 24 (universal)
Protection degree as per GOST 14254	IP67
Climatic design as per GOST 15150	"U"
Operation mode as per GOST R 52230	nominal continuous (S1)



•		٠

	Model			
	Makhaon-3-3	Makhaon-3-6	Makhaon-3-9	
ED number	3	6	9	
Maximum consumed current pulse), A, not more:	0,75	1,5	3,0	
verage consumed power, W, not more:	8	16	24	
overall dimensions, mm, not nore:	106 x 28 x 15	182 x 28 x 15	258 x 28 x 15	
tem mass, kg, not more:	0,4	0,6	0,8	

Synchronous operation with single control of up to 16 LED units connected in a common network is possible. It is allowed to connect the units of different colors with any number of LEDs into a common network.





25









SPICH-1

Loudspeaker





Purpose

The SPICH-1 loudspeaker enables the driver or an adult caregiver present in the driver's cab (group manager) to maintain a one-way communication with the compartment (to send messages and commands). The internal speakers are located in the upper bus passenger compartment partition.



Speakers



List of components

- Power unit
- Microphone
- 8 Om 2W 2 speakers
- Mounting kit



Power supply

12 V, 24 V

Rated power output [W]

2

Overall power unit dimensions [mm]

 $77 \times 74 \times 50$



SPICH-2

loudspeaker







loudspeaker

Purpose

External

The SPICH-2 loudspeaker enables the driver or an adult caregiver present in the driver's cab (group manager) to maintain a one-way communication with the compartment (to send messages and commands) and to make announcements via an external speaker. The internal speakers are located in the upper bus passenger compartment partition. The eternal horn speaker is located in the engine compartment or on bus roof.

List of components

- Power unit
- Microphone
- 8 Om 2W 2 speakers
- Horn loudspeaker
- Mounting kit

SPICH-3

loudspeaker



Purpose

Microphone

The SPICH-3 loudspeaker enables the driver or an adult caregiver present in the driver's cab (group manager) to maintain a one-way communication with the compartment (to send messages and commands) using an built-in acoustic system.

List of components

- Power unit
- Microphone
- Mounting kit
- 1,012.6 = 3.5 cable stereo pin



PUBLIC ADDRESS SYSTEM





Public address system

GROM



- Ensures speech broadcasting
- Audio signals can be sent in emergency cases
- Ensures feedback: message receipt from visitors from the external microphone and their playback through speakers
- The microphone and pedal activating the "on air" mode free the operator's hands
- Two broadcasting modes: Loud/Quiet
- The operating mode light indication facilitates mode selection for the operator
- The plant needs a 220 V supply voltage, meaning it can be connected in any room of the building
- Alert area depending on the operating mode (Loud/Quiet) selected:
- in premises measuring from 10 to 200 300 m² in area
- over adjacent territory measuring up to 500 m²

Specifications

client's (external) microphone

Voltage [V] 220 Power consumption [W] Operating modes Loud/Quiet Public address one-way/two-way

Overall power unit dimensions [mm]

 $162 \times 158 \times 60$



To the cabin





Intercom

SHIHAN

Purpose

"Shihan" intercom is used for installation on transport vehicles to provide loudspeaking and phone communication between compartments of transport vehicles as well as for controlling of up to 10 opening sensors with voice alert.

Specifications

Overall dimensions [mm]	$175\times130\times95$
Power consumption [W]	2
Voltage [V]	10,8 30
Protection degree as per GOST 14254	IP42
Maximum consumed current, A, not more:	0,5
Operation mode as per GOST R 52230	nominal continuous (S1)



To the passenger compartment





TAGANAY





Purpose

The TAGANAY intercom is designed for motor vehicle equipment to enable hands-free communication between the cabin and passenger compartment separated by a partition.

Specifications

Voltage [V]	
12 / 24 (universal)	
Power consumption [W]	
2	
Operating modes	
continuous	
Overall speaker dimensions [mm]	
166 × 164 × 60	

microphone







FOLLOW ME 12DT

light unit for aircraft escort vehicles



Purpose

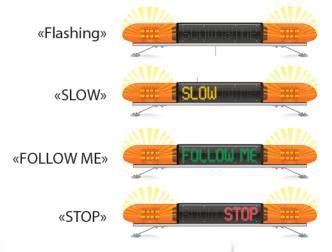
Equipping aircraft escort vehicles at airports.

Specifications

Model	Follow me 12DT
Dimensions, mm (max.)	1,238 × 300 × 150
Weight, kg (max.)	11
Power, V	12 (10,8 15)
Flasher frequency, Hz	1– 1,5
Maximum power consumption, A	5
Light source	LED optical system



Operation modes



Operation modes are controlled with the buttons connected to the cable:

SA1 «Flashing» mode on

SA2 «SLOW» indication on the panel

SA3 «FOLLOW ME» indication on the panel

SA4 «STOP» indication on the panel



FOLLOW ME 12D

light unit for aircraft escort vehicles



Specifications

- The product generates light flashing signals from LED units or category H1 lamps mounted in the left and right lighting units with light propagation backward and forward.
- The product ensures a continuous illumination of the red FOLLOW ME inscription on the rear part of the central lighting unit.

Specifications

Model	Follow me 12D
Dimensions, mm (max.)	1,238 × 300 × 150
Weight, kg (max.)	11
Power, V	12 (10,8 15)
Flasher frequency, Hz	1–1,5
Maximum power consumption, A	5
Light source	LED optical system

The control is performed using a 4-button microphone.



Purpose

To equip the special vehicles escorting aircrafts to the runway and from the runway to the passengers unloading place.

Operation modes





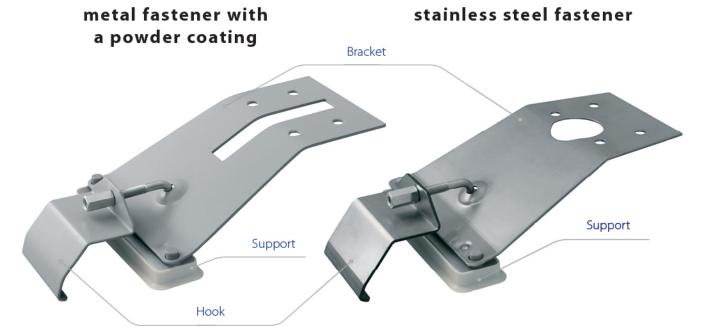


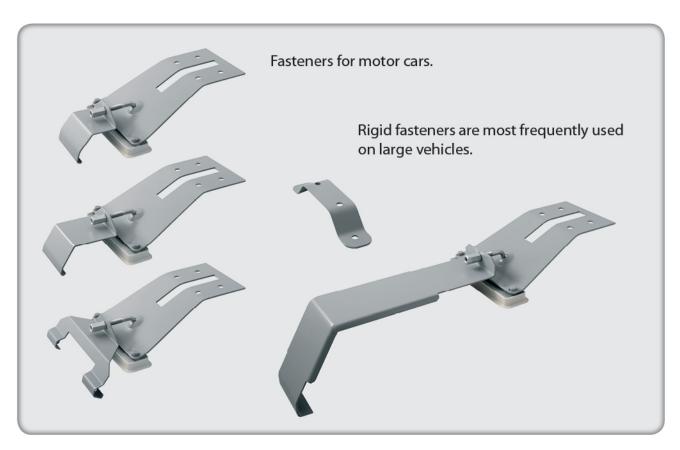
FASTENERS, SPEAKERS, SIRENS



LIGHTBAR FASTENERS

Over 40 hook modifications have been developed for various vehicles.





SIRENS, SPEAKERS

Increased horn loudspeaker uptime through the use of magnetorheologic suspension in the magnetic circuit gap.





OUR ACHIEVEMENTS

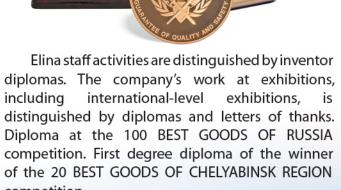
Our successes and achievements are the result of work of a close-knit team of professionals and our partners.

Prize of the Leader competition announced among companies cooperating with the State Traffic Safety Inspectorate in the Ministry of the Interior. Patriot and Smerch lightbar with remote control from a microphone are distinguished by high grades from members of the Grand Jury.

ELINA was awarded the gold medal of the National Safety competition, which is one of the most important and prestigious competitions in Russia in the field of safety, for the development and implementation of the Premier/Patriot-3S LED light lightbar.

Certificate of conformity from the Road Traffic Safety Research Center in the Ministry of the Interior; certificate of conformity from the FKU NPO STIS in the Ministry of the Interior of Russia.





STOP STOP



SOCIAL PROJECTS

The company is actively involved in social projects. We continuously support children's creativity centers: Firebird Feather in Chelyabinsk and Childhood Rainbow in Kopeisk.

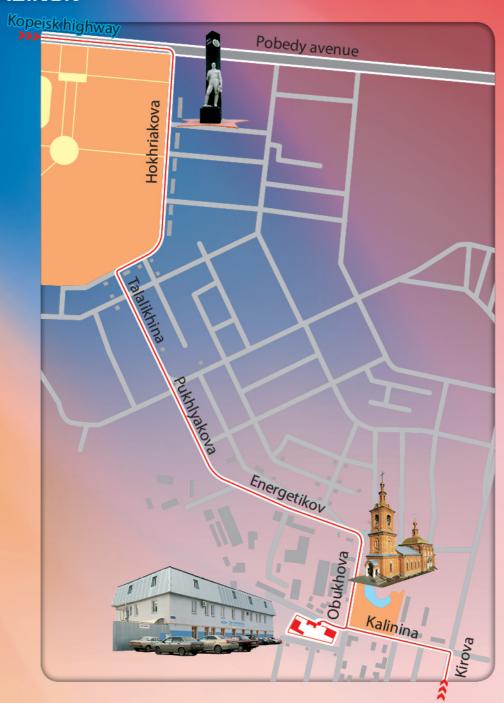






THE QUALITY MANAGEMENT SYSTEM MEETS THE REQUIREMENTS OF THE ISO 9001-2015 INTERNATIONAL STANDARD

CHELYABINSK



From Chelyabinsk ring road

ELINA INDUSTRIAL COMPANY

Apt 511, 4 Vitebskaya street, Chelyabinsk, Chelyabinsk Region 454126, Russian Federation Standalone division: 6 Obukhova Street, Kopeisk 456610, Chelyabinsk Region.

Tel.: +7 (351) 729-98-80, факс 729-98-81

Toll-free throughout Russia: 8 800 100 55 74 e-mail.: elina@elina.ru