FERROPILOT
A brand of ELNA

LED Searchlight

Models: 150 / 151 / 220s / 970SL

Instruction Manual

Content

LED Searchlight 220s / 970SL **4**
Scope of delivery 4
Installation 4
Features 4
Operation 5
Remote control programming 6
Joystick installation 6
LED Searchlight 150 / 151 7
Scope of delivery 7
Installation 7
Features 7
Operation 8
Remote control programming 8
Safety instructions 8
Technical data 9
Disposal 10
Declaration of Conformity 10

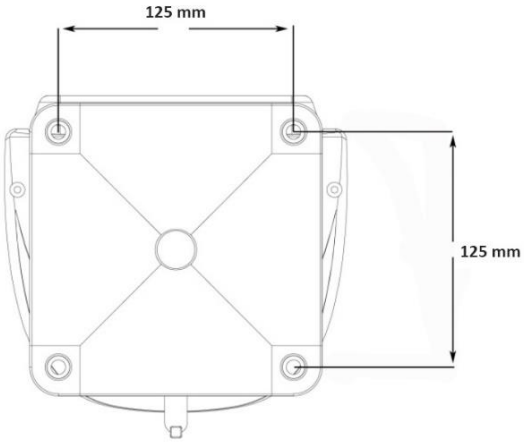
LED Searchlight 220s / 970SL

Scope of delivery

- Model 220s / 970SL LED Searchlight
- Wireless remote control (1970411)
- Joystick control with cable (1970431)

Installation

Drill hole: 9,05mm
Distances according to the drawing on the right
Unit of measurement: mm



Do not mount the headlight vertically or upside down. Otherwise function and tightness cannot be guaranteed.

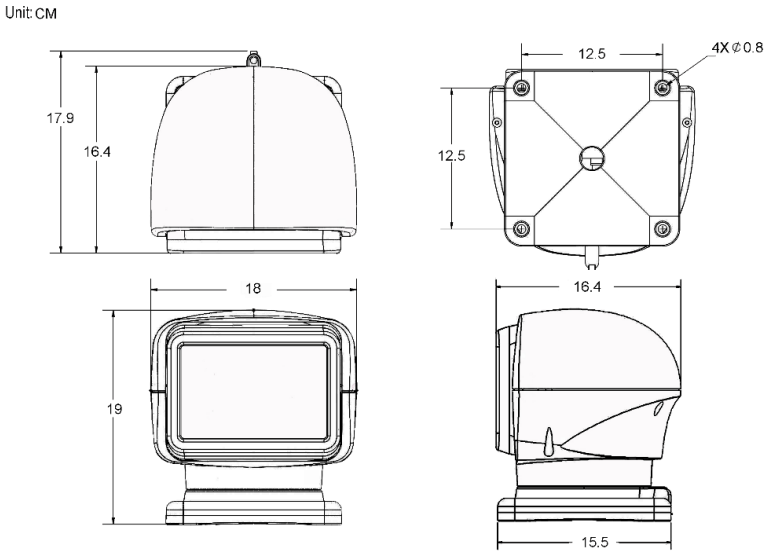
Features

- LED light
- 360° unlimited rotation / 135° tilt
- Programmable wireless remote control
- Resistant to UV radiation and salt water
- Automatically returns to the initial position as soon as the device is switched off

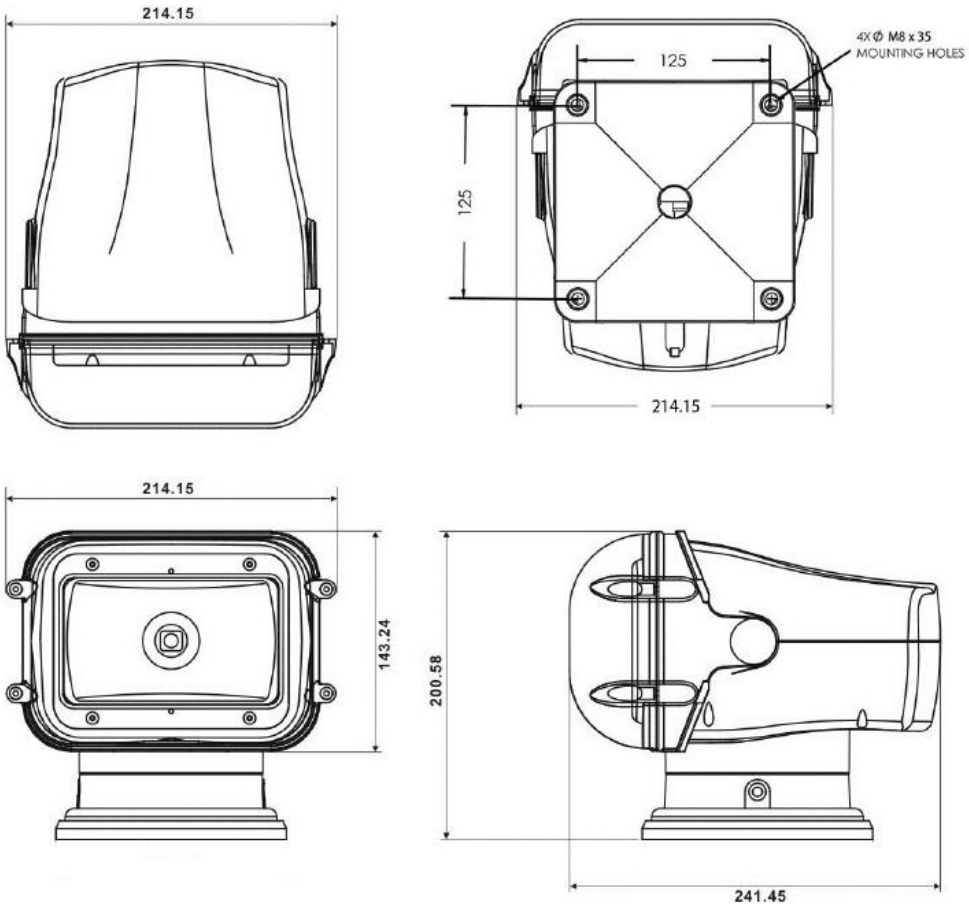
***** *Important note: If the DC power supply of the headlamp is interrupted (cable disconnected from the battery or power off), please perform a full 360° rotation after reconnection (using the remote control or joystick) to restore the calibration of the initial position.* *****

- Housing color: Black or white
- Dimensions: According to drawings (unit of measurement: mm)

Model 220s

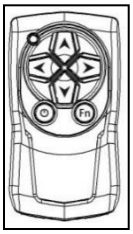


Model 970SL



Operation

Remote control:



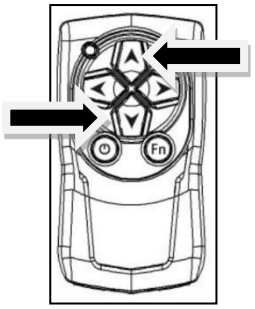
- Press on/off button to turn on/off the searchlight.
  Use the arrow keys to control the searchlight

  Up = ▲ Down = ▼ Right = ▶ Left = ◀

- Press "Fn" button to set the speed (Fast or Slow)

Radio frequency: 433.92MHz
Remote control battery: 2 x 23A (LR23A)
Remote control range: 65m

Remote control programming

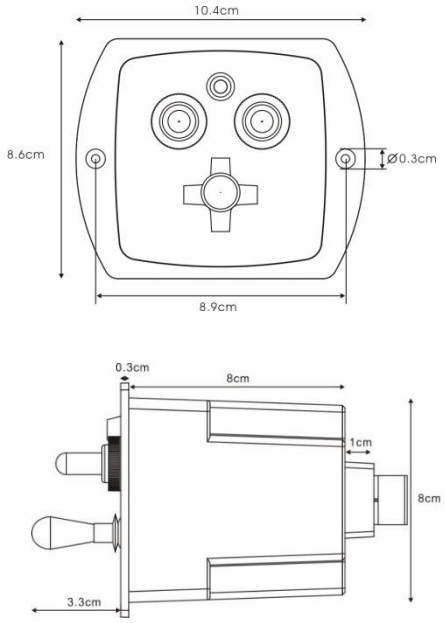


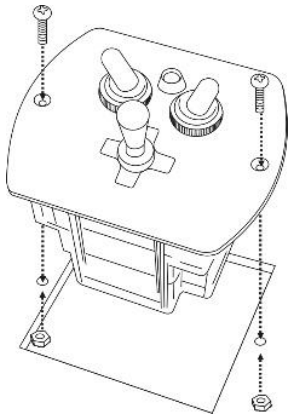
1. Switch off the DC power supply or disconnect the device from the battery.
2. Make sure that no other transmitter is active at the same time.
3. Turn on the DC power and press the Up ▲ and Down ▼ buttons simultaneously within 5 seconds
4. the searchlight will light up to confirm that the connection to the remote control has been established.
5. To program a second remote control, press the Up and Down buttons of the second remote control within 5 seconds after programming the first remote control (or repeat step 1).

(Note: up to 4 remotes can be used with one fixture, programming a fifth will replace the first).

Joystick installation

Joystick (1970431)





When installing the data cable, make sure that the rectangles shown on the plug and socket are opposite each other. Otherwise there will be a malfunction and the searchlight will have no function.

Installation dimensions (cut-out size): 80 x 80 mm

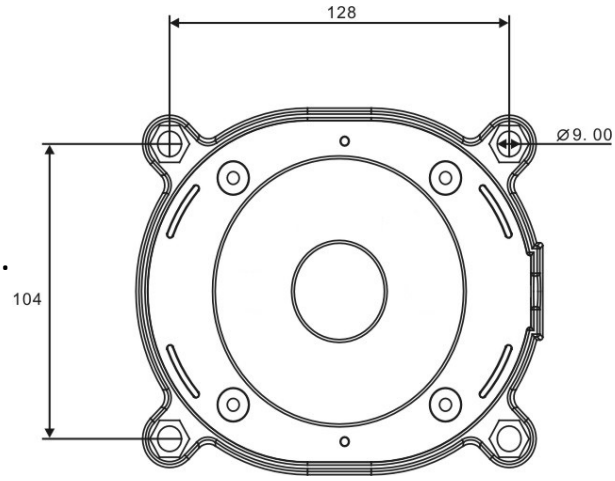
LED Searchlight 150 / 151

Scope of delivery

- Model 150 (without magnetic base) or 151 (with magnetic base)
- Wireless remote control (1970411)
- Screw set for mounting

Installation

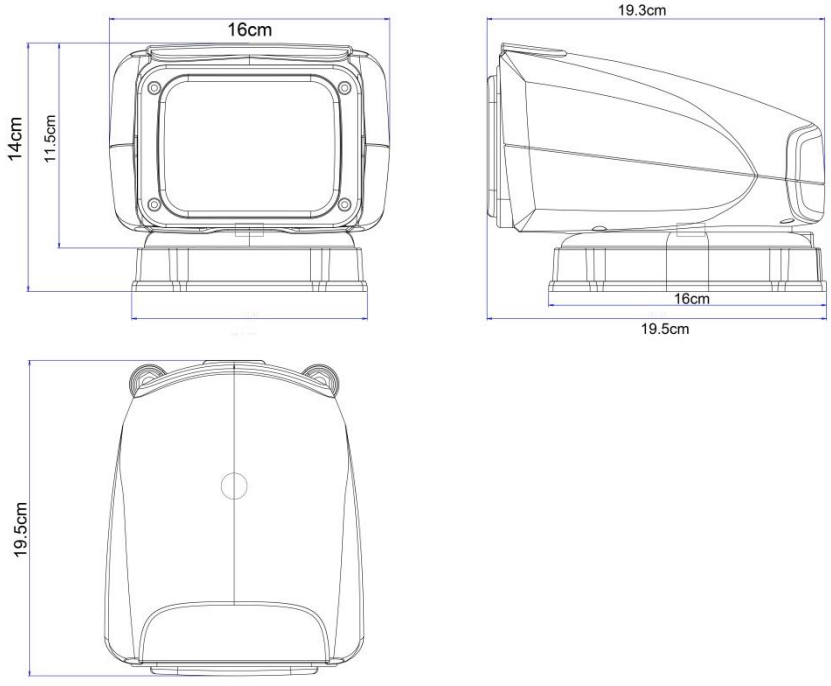
Drill hole: 9.00mm
Distances according to the drawing on the right
Unit of measurement: mm



Do not mount the headlight vertically or upside down. Function and tightness cannot otherwise be guaranteed.

Features

- LED light
- 360° rotation / 90° tilt
- Programmable wireless remote control
- Resistant to UV radiation and salt water
- Weatherproof for use on land and sea
- Working temperature: -30°C to +70°C
- Housing color: Black or white
- Dimensions: According to drawings (unit of measurement: mm)



Operation

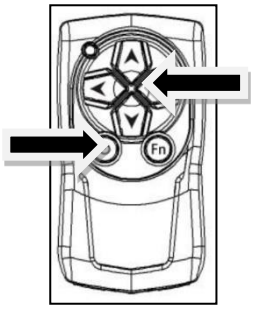
- Connect the headlight with 12V DC power supply
- Press on/off button to turn on/off the searchlight.
  Use the arrow keys to control the searchlight

  Up = ▲ Down = ▼ Right = ▶ Left = ◀

- Press "Fn" button to set the speed (Fast or Slow)

Radio frequency: 433.92MHz
Remote control battery: 2 x 23A (LR23A)
Remote control range: 65m

Remote control programming



1. Switch off the DC power supply or disconnect the device from the battery.
2. Make sure that no other transmitter is active at the same time.
3. Turn on the DC power and press the Up ▲ and Down ▼ buttons simultaneously within 5 seconds
4. the searchlight will light up to confirm that the connection to the remote control has been established.
5. To program a second remote control, press the Up and Down buttons of the second remote control within 5 seconds after programming the first remote control (or repeat step 1).

(Note: up to 4 remotes can be used with one fixture, programming a fifth will replace the first).

Safety instructions

- The terminals on the LED module should be correctly connected to the positive and negative cables.
  1. RED and BLUE: Positive (+)
  2. BLACK and BROWN: Negative (-)
- This searchlight is a high frequency device operating on channel 433.92MHz. It emits high frequency waves when in use.
  1. high frequency waves may cause interference to electrical equipment.
  2. some electrical equipment in vehicles or on boats may be disturbed by the high frequency waves.
- FCC Rules Part 15.21 ： Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
- This device complies with FCC Rules Part 15, and its use is subject to the following conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.
- **The fixture is not designed for vertical or upside-down mounting. This may affect operation and tightness.**
- Do not rotate or tilt the headlamp by hand or other external forces.
- Find a free and level surface to mount the headlamp and make sure that there are no other objects in the way of rotation/tilt

Technical data

	Model 150 / 151	**Model 220s**	**Model 970SL**
LED	6 LED from Osram	10x LED from Osram	10x LED from Osram
Watt	30 Watt	50 Watt	50 Watt
Luminous intensity (Candela)	240.000	460.000	350.000
Beam distance	Ca. 980m	Ca. 1.370m	Ca. 1.200m
Color Temperature	5.700 – 6.000K	5.700 – 6.000K	5.000K
Beam Pattern	Spot with 8 degree Beam	Spot with 8 degree Beam	Spot with 8 degree Beam
Rotation	360° horizontal; 90° vertikal	360° horizontal (continuous); 135° vertikal	360° horizontal (continuous); 135° vertikal
Voltage	DC 12V or 24V	DC 12V ~ 24V	DC 12V ~ 24V
Energy consumption	13,8V – 2A; 28V – 1,1A	13,5V – 5A; 28V – 3A	13,8V – 4A; 28V – 2A
Dust & Waterproof	Housing IP56 LED module IP 68	Housing IP56 LED module IP 68	Housing IP56 LED module IP 68
Material housing	Plastic (ASA)	Plastic (ASA)	Plastic (ASA)
Material LED housing	Aluminium housing as heat sink	Aluminium housing as heat sink	Aluminium housing as heat sink
Material lens	Polycarbonate tempered	Polycarbonate tempered	Polycarbonate tempered
Colors	White / Black	White / Black	White / Black
Working temperature	-30°C bis +70°C	-30°C bis +70°C	-30°C bis +70°C
Dimensions	16 x 14 x 19,5 cm	18,15 x 19 x 16,4 cm	21,4 x 20 x 24,2 cm
Weight	1,4 kg (w/o Magnet); 1,8 kg (with Magnet)	2,1 kg	2,5 kg
Special functions	Model 151 with 4m cable/adapter for cigarette lighter	Automatically returns to home position when switched off	Automatically returns to home position when switched off
Scope of delivery	Wireless remote control	Wireless remote control and Joystick	Wireless remote control and Joystick
Mounting option	M150: Permanent M151: Magnet	Separate magnetic holder	Separate magnetic holder

Disposal

The article and its packaging were made from valuable materials that can be recycled. This reduces waste and protects the environment. Dispose of the packaging according to type.

The LED searchlight is marked with this symbol and must not be disposed of with household waste! You are required by law to dispose of old devices separately from household waste. Information on collection points that accept old devices free of charge can be obtained from your municipal or city administration.

Declaration of Conformity

Hiermit erklärt die ELNA GmbH, dass die Suchscheinwerfer Modelle 970SL / 220s / 150 / 151 zum Zeitpunkt des Inverkehrbringens die grundlegenden Anforderungen und die übrigen einschlägigen Bestimmungen der Richtlinie 2014/53/EU erfüllen. Die vollständige Konformitätserklärung finden Sie unter www.ferropilot.de/led

Distributor:

ELNA GmbH
Heidehofweg 22
25499 Tangstedt
Germany

Tel.: +49 (0)4101/301 0
info@ferropilot.de
www.ferropilot.de

FERROPILOT is a brand of ELNA GmbH

V2-2022