



elebia®

the safety hook



Table of contents

- 4 -5** Safety recommendations
- 6** elebia® autohook system / Installation
- 7** Main features
- 8** Specifications / Regulatory standards
- 9** elebia® remote control / Working modes
- 10** 24v cc Charger / 230v Charger
- 11** Inspection / Maintenance / Guarantee
- 12** Conformity declaration and manufacturer's certificate

Safety recommendations

As the manufacturer has no direct control over the operation of the elebia® autohook, the safe handling of the equipment is therefore the responsibility of the user and of the operating personnel. This list of WHAT MUST and WHAT MUST NOT BE DONE is based on the ISO and ANSI standards. Ask your supervisor for a copy. Each warning is identified either with the PRECAUTION or the WARNING sign, to indicate the degree of seriousness.



NOTE: the system features a powerful magnet. Do not approach with metal items. Magnetic cards, credit cards, hard disks and other magnetic elements may be damaged if brought close to the magnet.



NOTE: disconnect power sources prior to handling.

Warning

Under no circumstance does the manufacturer either accept any liability for the use of these recommendations, which are voluntary, or guarantee them. The recommendations do not take precedence over standards and regulations.

Breakdowns

In the event of breakdown or malfunction, withdraw the mechanism and consult the technical service.

Warnings

1. Keep a steady posture or secure yourself somehow when operating the elebia® autohook.
2. Use the hook's safety catch. The safety catches are to hold slings and chains, etc. only when slack.
3. Make sure that the hook's safety catch is closed and no load is sustained.
4. Make sure that the load is free to move and free of all obstacles.
5. Avoid swinging the load or the hook.
6. Inspect the elebia® system regularly, replace damaged or worn parts, and keep proper maintenance records.
7. Use the replacement parts recommended by the manufacturer when the unit is repaired.
8. DO NOT allow your attention to waver when handling the elebia® autohook.
9. DO NOT allow improper use of the elebia® autohook cause it to knock structures or objects.
10. DO NOT adjust or repair the elebia® autohook. This must be done by qualified personnel.
11. Ensure that the recommended maintenance routines are performed.

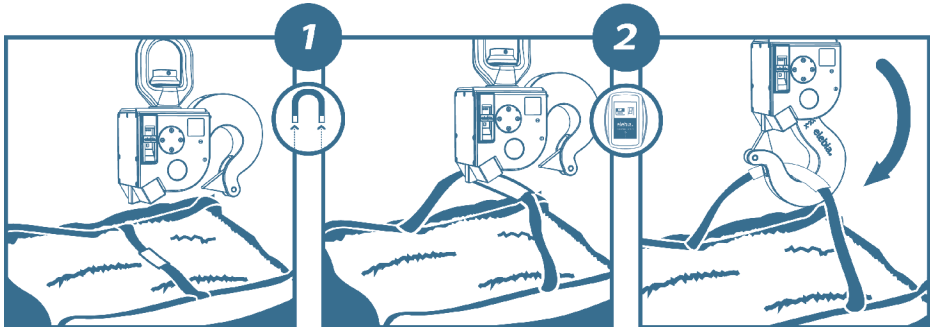
Precaution

Inappropriate use of the elebia® autohook may give rise to potentially dangerous situations and, if not prevented, these could lead to death or serious injury. To avoid such situations the operator must:

1. NOT operate the elebia® autohook if it is not working properly or if working unusually.
2. NOT operate the elebia® autohook before having completely read and understood the manufacturer's operation and maintenance instructions or manuals.
3. NOT operate the elebia® autohook if it has been altered without the manufacturer's approval.
4. NEITHER lift nor pull more than the load stipulated for the elebia® autohook.
5. NOT use the elebia® autohook if it is damaged, lacks components or is not working properly.
6. NOT use the elebia® autohook with twisted, tangled, damaged or worn load slings.
7. NOT use the elebia® autohook to lift, sustain or transport people.
8. NOT lift loads over people and ensure that people remain at a distance from the load.
9. NEITHER attempt to work with the equipment nor repair it if it is damaged.
10. NOT apply the load either to the tip of the hook or its safety mechanism.
11. NOT leave the weight sustained by the elebia® autohook unattended unless specific precautions have been taken.
12. NOT allow the use of the elebia® autohook to make electrical or earth contact for welding operations.
13. NOT attempt to open the elebia® hook when it is loaded. When load is above 20Kg. Hook won't open, even if order is given. If you try to open the hook while load is less than 20Kg. it will drop it. It is advised to work in the "3B: Safe mode" to carry rigging accessories or loads under 20Kg.
14. NOT use the magnet to lift loads. Its sole function is to attract and align the sling or metal ring and thereafter place it inside the hook.
15. NOT allow the chain or the hook to be touched by a live welding electrode.
16. NEITHER withdraw NOR cover the warning signs of the elebia® autohook.
17. NOT operate the elebia® autohook if it has not been properly secured.
18. NOT lift loads unless the load slings or other accessories are of the correct size and suitably fastened to the hook.
19. NOT operate the mechanism if there are people touching it or very close to it.
20. NOT operate the elebia® autohook when it is not in a vertical position.
21. NOT lift loads that are neither balanced nor secured or if the load is not suitably fastened. Any slackness must be carefully tightened.
22. NOT operate the elebia® autohook unless all people are and remain outside the area of the sustained load.
23. Provide notification of any malfunction or abnormal performance of the elebia® autohook, after the system has been disconnected for repair.
24. NOT operate the elebia® autohook if it lacks the safety signs or if they are illegible.
25. Be familiar with the elebia® autohook's operation controls, procedures and warnings.

elebia® autohook system

It's that simple ...
1,2, elebia.

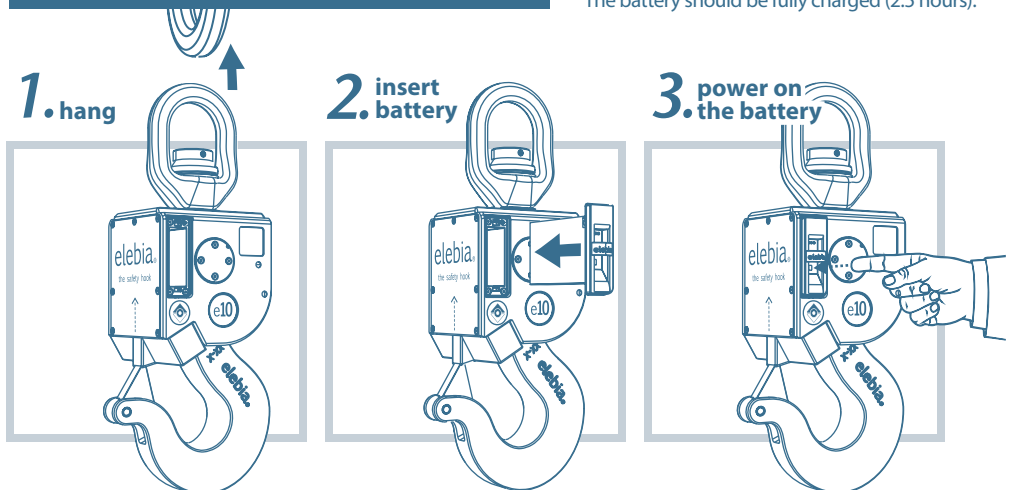


elebia® presents the automatic remote control hook system that hooks and releases loads, and avoids handling. The patented elebia® autohook has a magnet at the bottom, which when brought close to the load, attracts and aligns the sling. The user presses a button on the remote control, the hook closes, catches the sling and lifts the load, thus avoiding any handling at all. The system can operate with cable slings, chain slings, traditional lifting rings, textile slings, pallet lifters and even big bags.

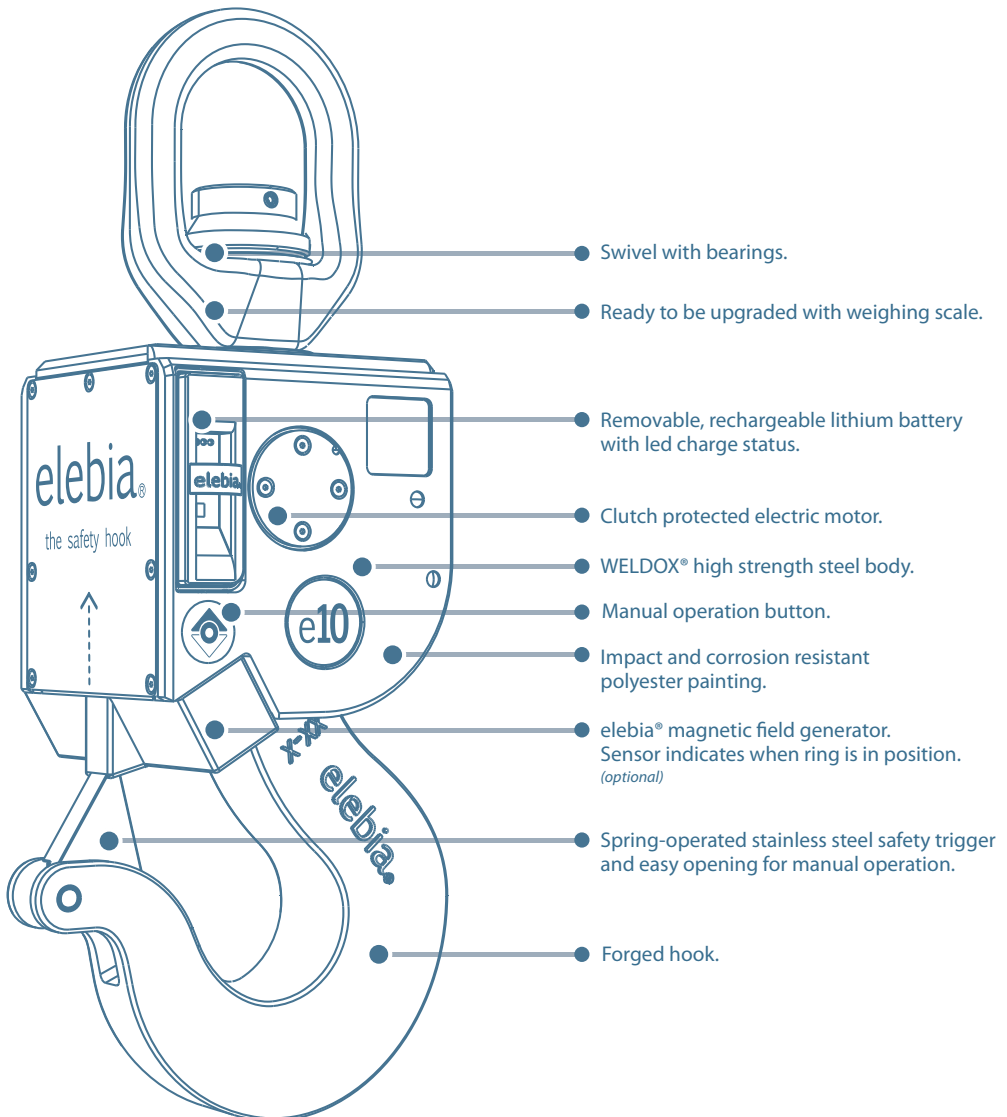
Visit www.elebia.com and watch it on video.

Installation

Simply connect the battery and join to the crane
*The battery should be fully charged (2.5 hours).



Main features



Specifications

	e5	e10	e20
A	276 / 10.87	342 / 13.46	342 / 13.46
B	172,5 / 6.79	182,5 / 7.18	182,5 / 7.18
C	469 / 18.46	584 / 23.99	663 / 26.10
D	409 / 16.10	485 / 19.10	553 / 21.77
E	194 / 7.64	246 / 9.68	246 / 9.68
F	43 / 1.70	66 / 2.60	66 / 2.60
G	48,5 / 1.91	67,8 / 2.67	105 / 4.13
H	57,6 / 2.24	88 / 3.46	88 / 3.46
I	24,2 / 0.95	41,1 / 1.62	41,1 / 1.62
J	41,4 / 1.63	72 / 2.83	72 / 2.83
K	58 / 2.28	82 / 3.23	115 / 4.53
L	351 / 13.81	401 / 15.79	480 / 18.90

mm / inches

Model:	e5	e10	e20
Working Load Limit:	5Tn	10Tn	20Tn
Approximate weight:	24 Kg / 52.91Lbs	35 Kg / 77.17Lbs	40 Kg / 88.18Lbs
Maximum releasable weight	20 Kg / 44.10Lbs	20 Kg / 44.10Lbs	20 Kg / 44.10Lbs
Explosive atmospheres:	Not suitable	Not suitable	Not suitable

Safety factor 4:1 - IP65 - Working temp. range -20/+85 °C / -4/185 °F

Regulatory standards

- Directive on machine safety (D2006/42EC)
- UNE-EN 1050
- UNE-EN ISO 12100-1
- UNE-EN ISO 12100-2
- UNE-EN 61000-6-4
- UNE-EN 61000-6-2
- D89/391/EEC
- D89/654/EEC
- D89/655/EEC
- D89/656/EEC
- D92/58/EEC 9^a
- UNE-EN 1677
- EN 10204 3.1.B
- Assurance of production quality in accordance with ISO 9001
- Each mechanism is delivered with the CE stamp and a declaration of CE conformity
- Elebia® is a member of the F.E.M. (Spanish Federation of Maintenance)

Remote control



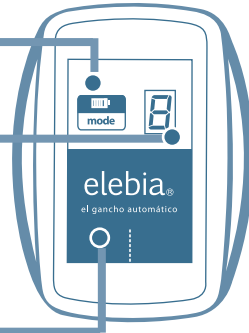
IP65



868 MHz

I Mode button

- '0 to 9' – autohook battery level
- 'C' - Check / maintenance
- '.' ring in position (only units with magnet sensor)
- 'A' - Remote's battery is low



I elebia® button

Power supply	1 3V lithium battery (CR2032)
Available Code Combinations	65,536 different combinations
Detection of Errors in Transmission	2 CRC bytes + Forward Error Correction
Buttons	2
Frequency selection	1
Frequencies	865.95 MHz / 869.85 MHz
Communication	Bi-directional return of receiver battery status
Certification standards	EN 300 220 Telecommunications EN 301 489 Electromagnetic Compatibility EN 60730 Low Voltage
Radiated power	under 5 dBm
Antenna	Printed circuit
Range	100 metres / 330 Feet
Consumption at rest/transmission operation	5 uA / 20 mA
Working temperature	-20 to +85°C / -4 to 185 °F
Dimensions	Minitel box (68 x 52 x 17 mm / 2,68 x 2,05 x 0,67 inches)

Working modes

The remote can work in 2 different modes:

> 'One button' mode:

'elebia®' button: open and closes the hook.

> 'Two buttons' mode:

'elebia®' button: closes the hook

'mode' button: opens the hook

To switch between modes, press and hold the 'elebia®' button for 10 seconds.

Power settings

The power of the motor can be adjusted in an elebia® technical service.

Display information

- 0 to 9: autohook battery level
- A: remote battery is low
- .
- (just autohooks with magnet sensor): the ring sling or handle is in position, ready to close the hook.
- C: it's time for maintenance of your autohook.
- 1b: you've entered the 'one button' mode
- 2b: you've entered the 'two button' mode
- b: the remote doesn't detect the hook
 - battery is not inserted.
 - battery is off
 - battery is empty

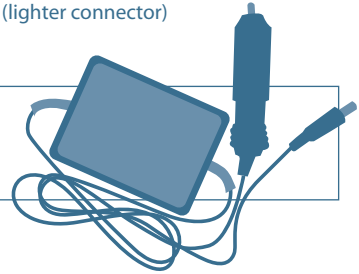
24v cc charger

OPERATION

Plug in the corresponding connector to the vehicle's lighter socket (lighter connector) and connect the jack at the other end of the cable to the battery.

IMPORTANT

This adapter/charger should be used only in vehicles with a 24-volt connector.



230v charger

Charger specially designed for lithium ion cells and packs.

Specifications

Number of cells
 Input voltage
 Output voltage
 Output intensity
 Charge indicator
 Charge complete indicator
 Dimensions
 Weight
 Recommendations

Technical specifications

6 Li-ion cells in series
 100V - 240V 50Hz - 60Hz 0.15 max
 25.2V
 1A max.
 Yes, by red LED
 Yes, by green LED
 52 x 33 x 75 mm / 2,05 X 1,30 X 2,95 Inches
 135 g / 0,30 Lbs
 For interior use only
 Only recharge Li-ion packs

* Recommendation:

Although battery charging cuts off when the charging process is complete, the adapter/charger should be disconnected once the process has finished (2.5 hours).

Inspection and maintenance

Proper maintenance of the elebia® autohook will lengthen its useful life and allow work to be done in safety. It is the user's responsibility to respect the 'Safety Recommendations' attached to this manual, to undertake the corresponding inspections, and to withdraw the mechanism in the event of deterioration or malfunction.

Frequent visual inspection to detect cracks and deformations, and inspection of crucial parts (hook opening) is recommended. In the event of cracks or deformations of over 1%, the mechanism must be withdrawn. A minimum of one service should be performed each year. Every 10,000 cycles, the letter C for "check" will appear on the display. elebia® service point should be visited for inspection and preventive maintenance. The frequency of inspections may vary according to the intensity and type of use in each case.

Non-performance of checks and maintenance may lead to cancellation of the guarantee.

Guarantee

The guarantee for elebia® products is for 2 years and covers parts and labour for the use envisaged and recommended in the system's manual of use. Batteries and maintenance operations, and the materials and labour involved therein, are exempt from guarantee.

Distributor / Service:
Date:

Maintenance check

Date:
Observations:

Date:
Observations:

Date:
Observations:

Date:
Observations:

Conformity declaration and manufacturer's certificate

ELEBIA AUTOHOOKS, S.L.U., with registered office at c/parís 45-47 entl. 3ª, 08029, barcelona, spain, Tax Identification Certificate: B65770265, and ISO 9001 certificate No. 9000041

DECLARES:

Under its sole responsibility, that the following model e5/e10/e20 elebia® automatic hook system, serial number _____, with a maximum operating load of 5.000 / 10.000 / 20.000 KG, manufacturer's test load of 122,7 / 245 / 490 KN and a minimum attained breaking load of 196,2 / 392 / 784 KN, complies with the EC Machinery Directive 2006/42/EC of the European Parliament and of the Council, of 22 June 1998, on the approximation of the laws of the Member States relating to machinery, and 2004/108/EC, on the approximation of the laws of the Member States relating to electromagnetic compatibility, and has been manufactured in accordance with the following harmonised standards:

EN-1677-1, EN-1677-2, EN-ISO12100-1, EN-ISO12100-2, EN-50081-2, EN-610006-2 and EN-60204-1: 1998.

As stipulated by EC Machinery Directive:

- CE symbol fixed to the autohook
- Technical documentation filed in manufacturer's site.

Authorised signatory:

Oscar Fillol Vidal

CEO of ELEBIA AUTOHOOKS



Barcelona, 15 May 2012