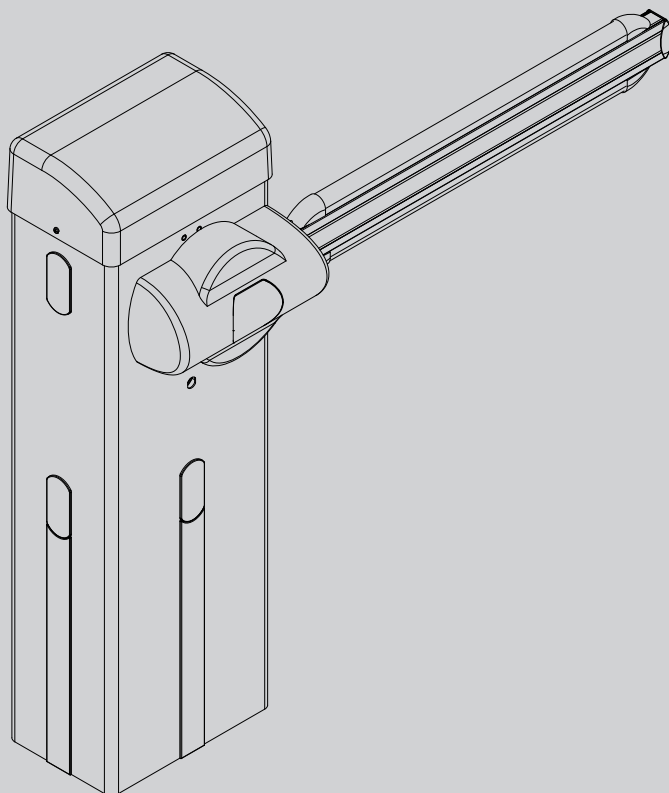




AUTOMATISMO ELETTROMECCANICO PER BARRIERA VEICOLARE  
 ELECTROMECHANICAL CONTROL DEVICE FOR VEHICULAR BARRIERS  
 AUTOMATISME ELECTROMECHANIQUE POUR BARRIERE POUR VÉHICULES  
 ELEKTROMECHANISCHER ANTRIEB FÜR FAHRZEUGSCHRANKEN  
 AUTOMATISMOS ELECTROMECHANICOS PARA BARRERAS VEHICULAR  
 ELEKTROMECHANISCH AUTOMATISERINGSSYSTEEM VOOR SLAGBOOM



ISTRUZIONI D'USO E DI INSTALLAZIONE  
 INSTALLATION AND USER'S MANUAL  
 INSTRUCTIONS D'UTILISATION ET D'INSTALLATION  
 INSTALLATIONS-UND GEBRAUCHSANLEITUNG  
 INSTRUCCIONES DE USO Y DE INSTALACION  
 GEBRUIKS- EN INSTALLATIEAANWIJZINGEN

GIOTTO 30-50 S BT  
 GIORNO 30-50 BT

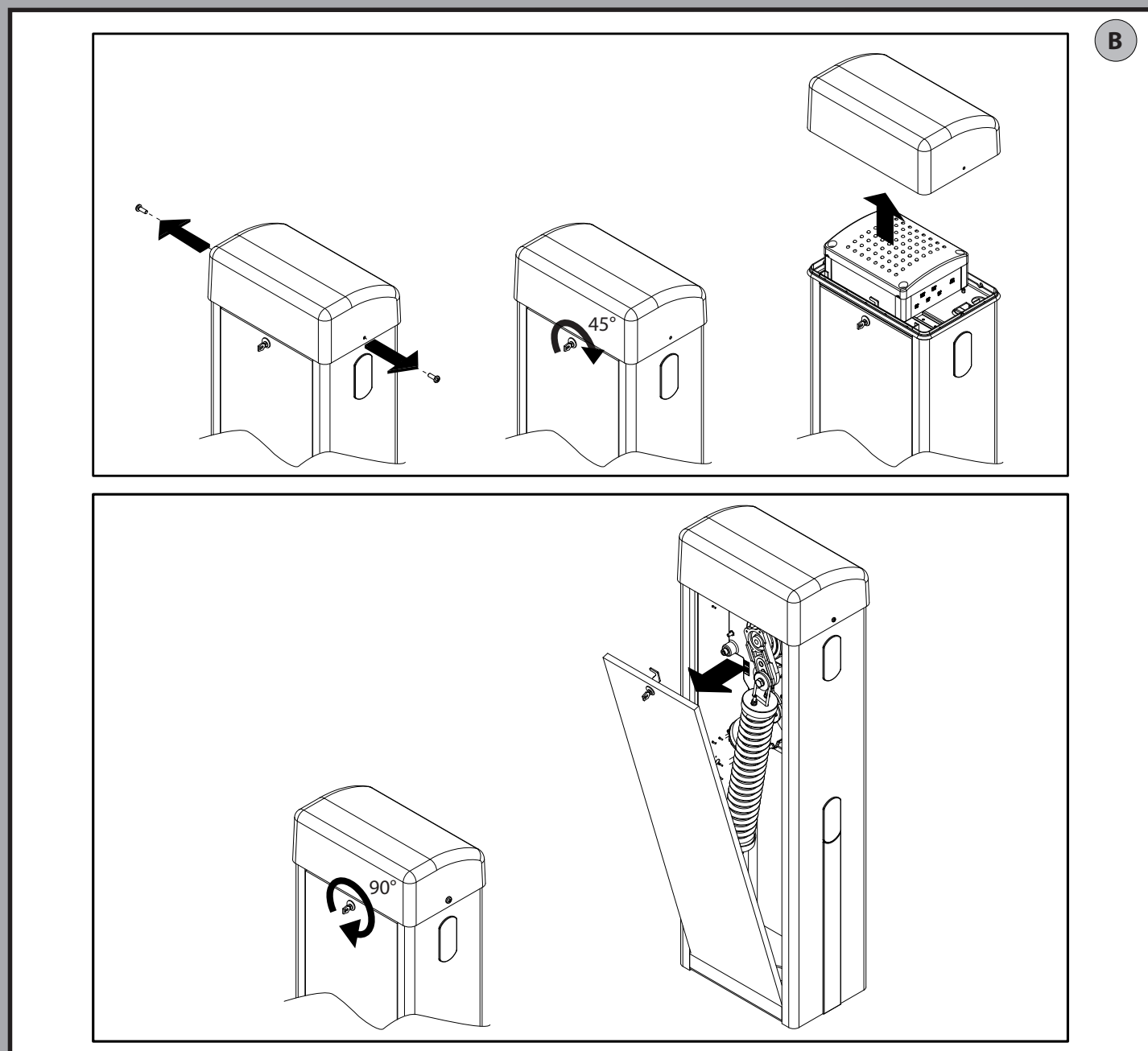
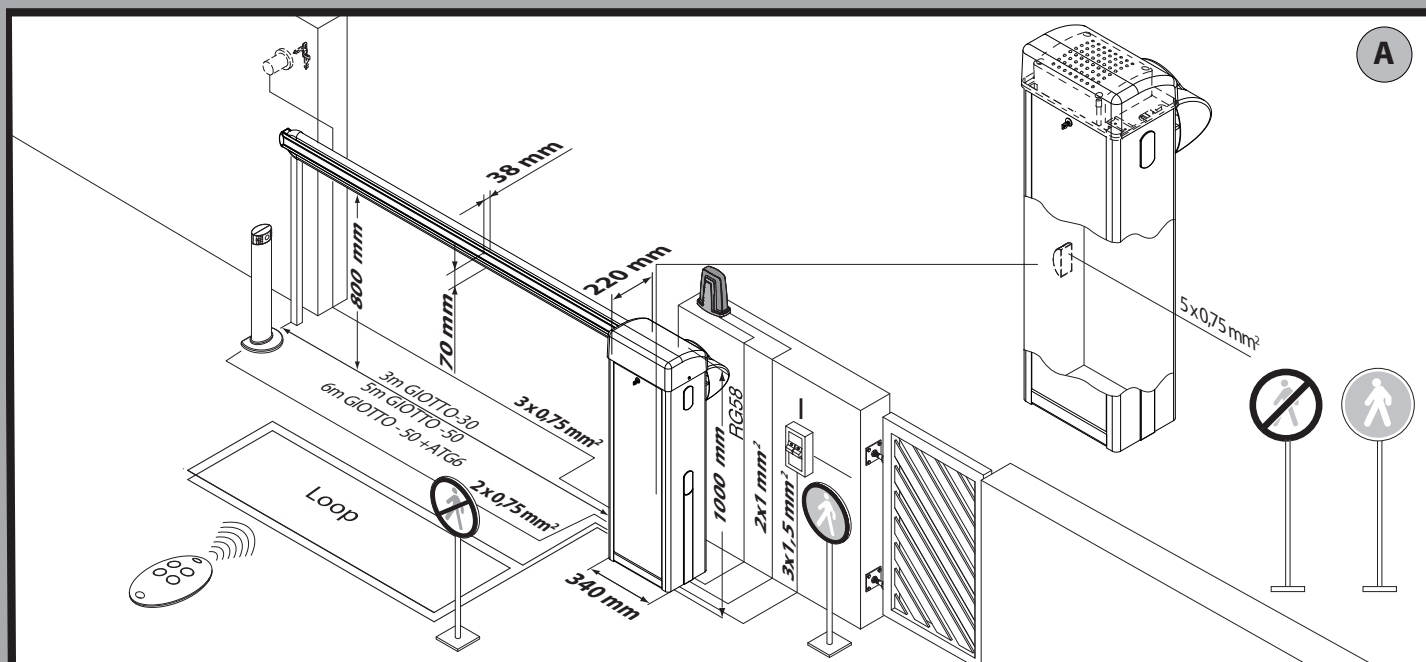
**Bft**



AZIENDA CON SISTEMA DI GESTIONE  
 INTEGRATO CERTIFICATO DA DNV  
 = UNI EN ISO 9001:2008 =  
 UNI EN ISO 14001:2004

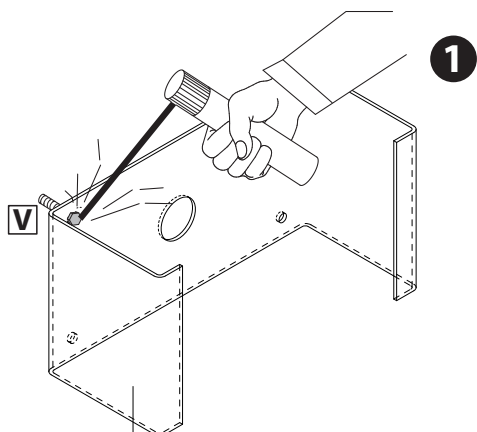
INSTALLAZIONE VELOCE-QUICK INSTALLATION-INSTALLATION RAPIDE  
SCHNELLINSTALLATION-INSTALACION RÁPIDA - SNELLE INSTALLATIE

D811768 00100\_03

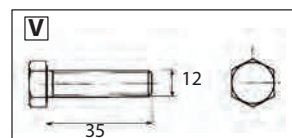
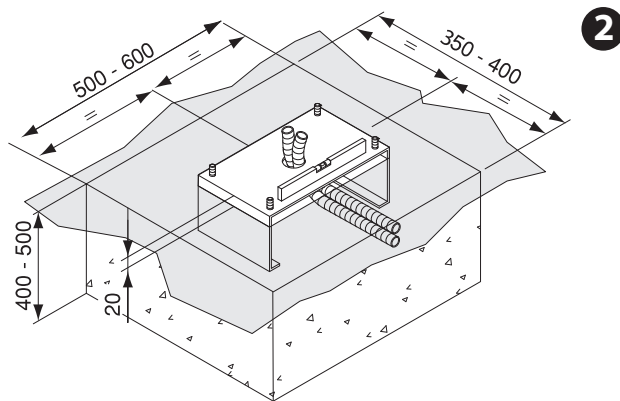


Con scavo di fondazione: // With foundation plate embedded in ground: // Avec tranchée de fondation: //  
Mit Fundamentgraben: // Con excavación de cimentación: // Met uitgraving:

B1

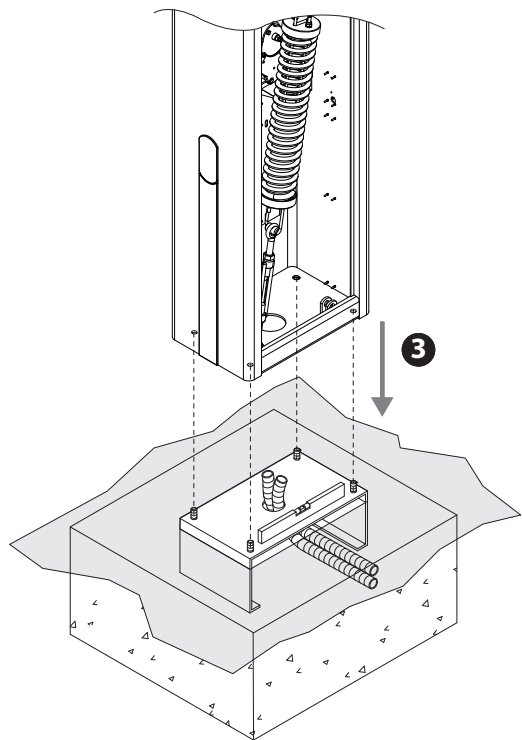


Non in dotazione  
Not supplied  
Ne sont pas fournis  
Nicht im Lieferumfang  
No asignadas en el equipamiento base  
Niet meegeleverd

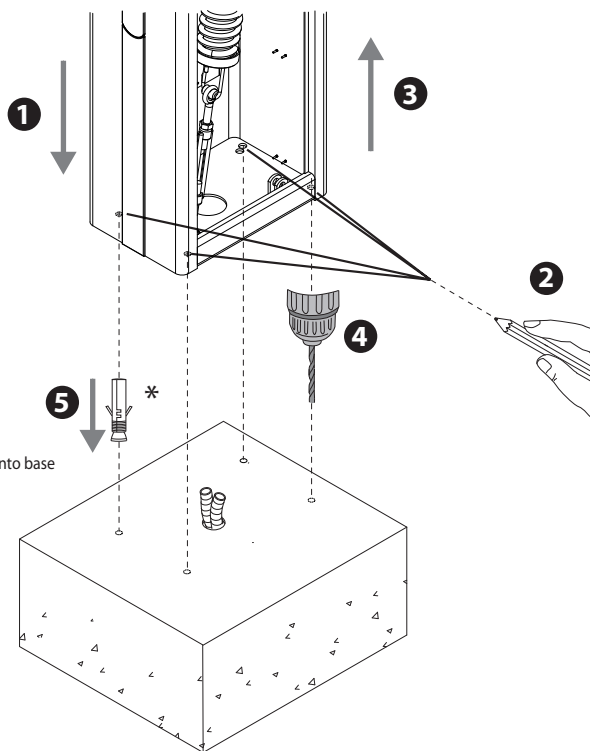
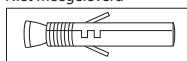


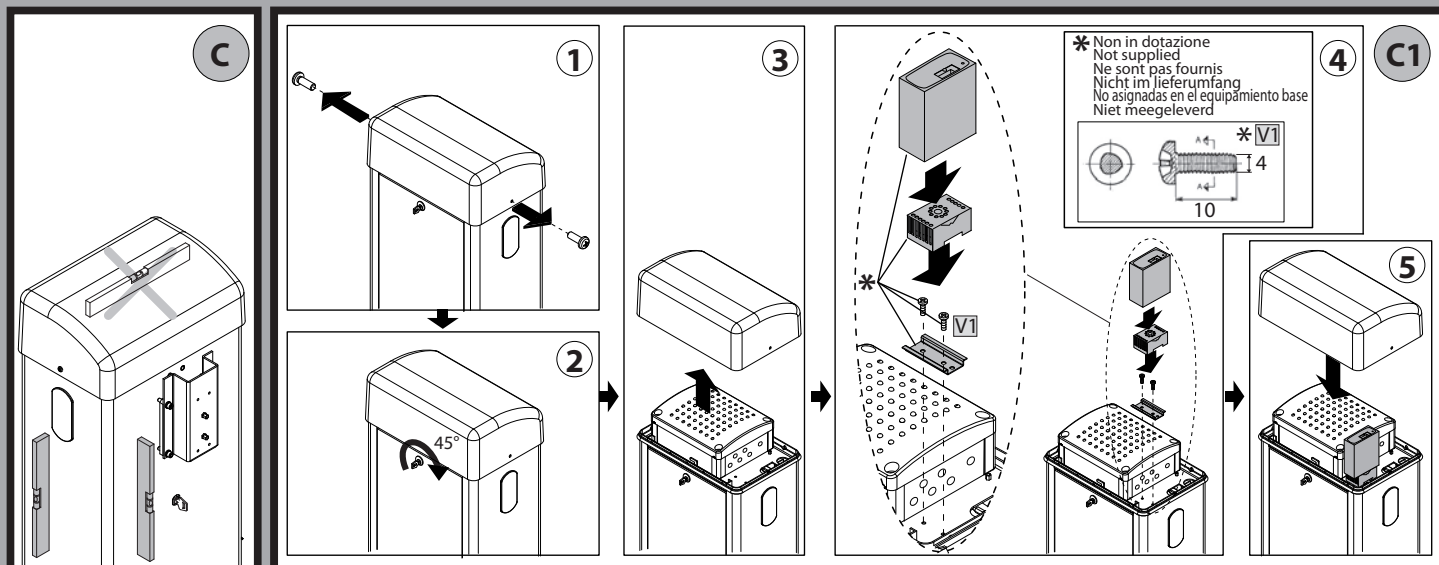
Con tiranti: // With anchor bolts: // Avec tirants: // Mit Ankerbolzen: // Con tirantes: // Met spankabels:

B2

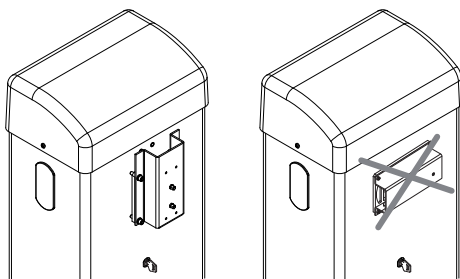


\*  
Non in dotazione  
Not supplied  
Ne sont pas fournis  
Nicht im Lieferumfang  
No asignadas en el equipamiento base  
Niet meegeleverd



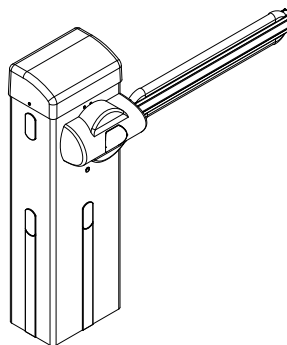


**Montaggio Asta, Assembly of boom, Montage de la barre,  
Montage der Stange, Montage mástil, Montage stang.**

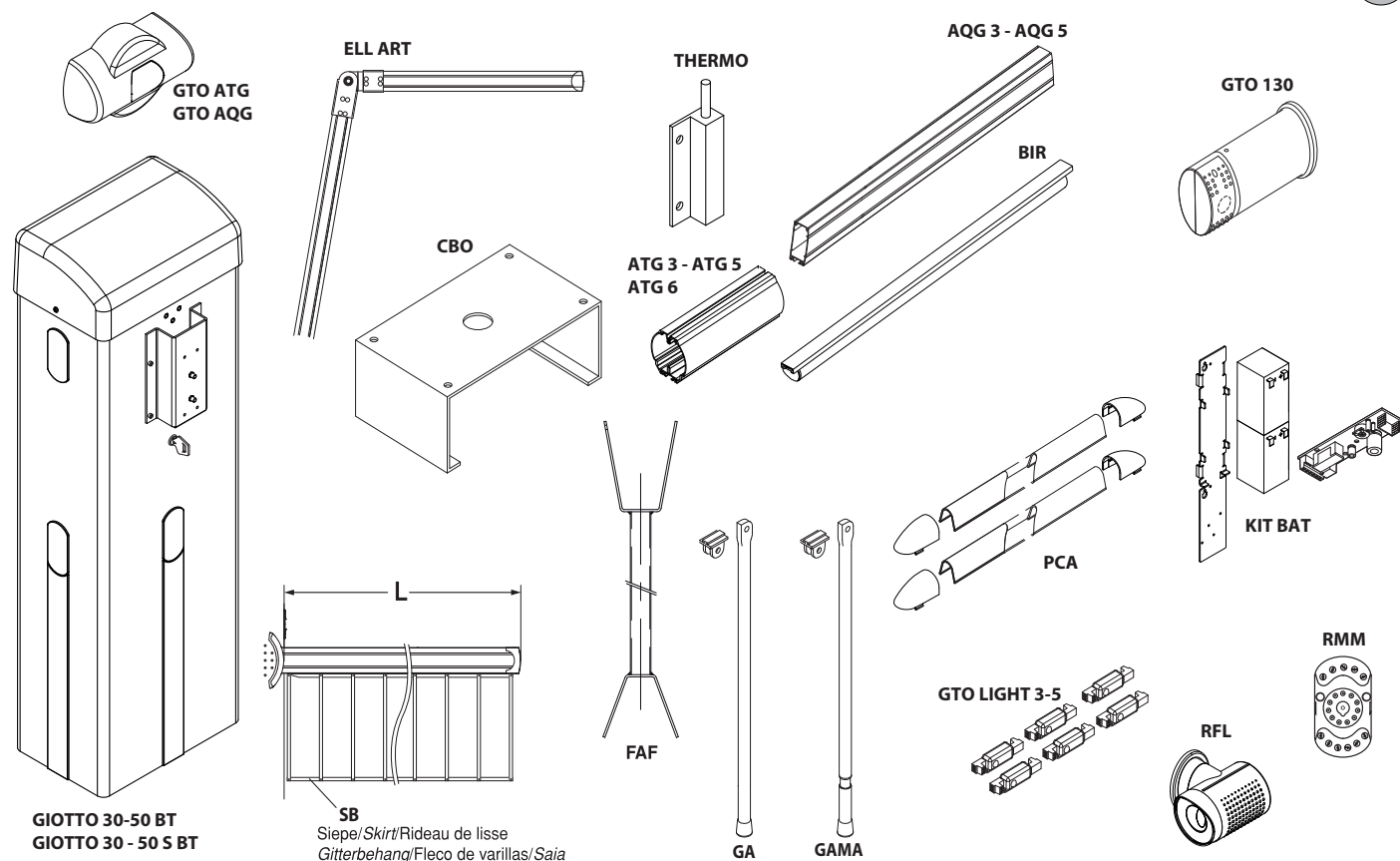




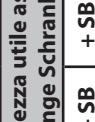
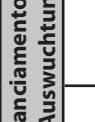

Assicurarsi che la molla non sia in tensione.  
Make sure the spring is not under tension.  
Vérifiez si le ressort n'est pas en tension.  
Sicherstellen, dass die Feder nicht gespannt.  
Asegurarse de que el muelle no esté tensado.  
Controleren of de veer niet onder spanning staat.

Per montaggio aste fare riferimento ai manuali ATG e AQG.  
See manuals ATG and AQG for boom assembly.  
Pour monter la barre consultez les manuels ATG et AQG.  
Für die Montage der Stange auf die Handbücher ATG und AQG Bezug nehmen.  
Para montaje de los mástiles consultar los manuales ATG y AQG.  
Voor montage stangen de ATG- en AQG-handboeken raadplegen.



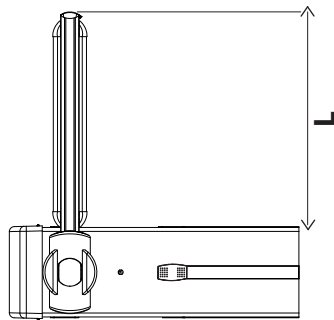
**Accessori opzionali, Optional extras, Accessoires facultatifs, Sonderzubehör, Accesorios Opcionales, Optionele Accessoires.**



GIOTTO BT /GIOTTO S BT		Accessori: lunghessa utile asta e bilanciamento. / Accessories: working length of boom and balancing. / Accessoirs: longueur utile de la barre et équilibrage.																						
Zubehör: Nutzlänge Schranke und Auswuchtung. / Accessoirs: longitud útil mástil y balance. / Accessoirs: nuttige lengte slagboom en balanceren.			+ SB	+ SB	+ SB									+ SB	+ SB	+ SB								
 A GIOTTO BT/ GIOTTO S BT 50	SB																							
	PCA (solo sopra l'asta)*1																							
	PCA (solo sotto l'asta)*2																							
	KIT GTO LIGHT																							
 B GIOTTO S BT 30	GAM																							
	BIR																							
	MIN L		3,2 m	3,2 m	3,3 m	3,7 m	3,8 m	4 m	4,2 m	4,3 m	4,5 m	4,8 m	3,4 m	3,4 m	3,6 m	4,1 m	4,2 m	4,4 m	4,6 m	4,7 m	4,7 m	4,7 m	4,7 m	5 m
	MAX L		3,5 m	3,6 m	3,7 m	4,2 m	4,3 m	4,5 m	4,7 m	4,8 m	5 m	5 m	3,8 m	3,8 m	4 m	4,5 m	4,6 m	4,9 m	5 m	5 m	5 m	5 m	5 m	
 A GIOTTO 50 BT/ GIOTTO 50 S BT + ATG 6	MIN L		2,4 m	2,5 m	2,6 m	2,9 m	2,9 m	3,1 m	3,2 m	3,3 m	3,5 m	3,7 m	2,7 m	2,7 m	2,8 m	3,2 m	3,3 m	3,4 m	3,6 m	3,7 m	3,7 m	3,7 m	3,9 m	
	MAX L		3,3 m	3,3 m	3,5 m	3,9 m	4 m	4,2 m	4,3 m	4,4 m	4,7 m	5 m	3,5 m	3,6 m	3,7 m	4,2 m	4,3 m	4,5 m	4,7 m	4,9 m	4,9 m	4,9 m	5 m	
	MIN L		2,4 m	2,5 m	2,5 m	2,9 m	2,9 m							2,7 m	2,7 m	2,8 m								
	MAX L		2,7 m	2,7 m	2,8 m	3 m	3 m							2,9 m	2,9 m	3 m								
 B GIOTTO 50 BT/ GIOTTO 50 S BT + ATG 6	MIN L		1,9 m	2 m	2 m	2,3 m	2,3 m	2,5 m	2,5 m	2,6 m	2,8 m	2,9 m	2,2 m	2,2 m	2,3 m	2,6 m	2,7 m	2,8 m	2,9 m	2,9 m	2,9 m	2,9 m		
	MAX L		2,3 m	2,3 m	2,4 m	2,7 m	2,8 m	2,9 m	3 m	3 m	3 m	3 m	2,5 m	2,5 m	2,6 m	3 m	3 m	3 m	3 m	3 m	3 m	3 m		
	MIN L		1 m	1,1 m	1,1 m	1,2 m	1,3 m	1,3 m	1,4 m	1,4 m	1,5 m	1,6 m	1,3 m	1,3 m	1,3 m	1,5 m	1,6 m	1,7 m	1,7 m	1,7 m	1,7 m	1,8 m	1,9 m	
	MAX L		1,9 m	2 m	2 m	2,3 m	2,3 m	2,5 m	2,5 m	2,6 m	2,8 m	2,9 m	2,2 m	2,2 m	2,3 m	2,6 m	2,7 m	2,8 m	2,9 m	2,9 m	2,9 m	3 m	3 m	
 A GIOTTO 50 BT/ GIOTTO 50 S BT + ATG 6	MIN L		3,2 m	3,2 m	3,3 m	3,7 m	3,8 m	4 m	4,2 m	4,3 m	4,5 m	4,8 m	3,4 m	3,4 m	3,6 m	4,1 m	4,2 m	4,4 m	4,6 m	4,6 m	4,6 m	4,7 m	5 m	
	MAX L		3,5 m	3,6 m	3,7 m	4,2 m	4,3 m	4,5 m	4,7 m	4,8 m	5 m	5 m	3,8 m	3,8 m	4 m	4,5 m	4,6 m	4,9 m	5 m	5 m	5 m	5 m	5 m	

L: Lunghezza utile asta.  
L: Working boom length.  
L: Longueur utile de la barre.  
L: Nutzlänge der Schranke.  
L: Longitud útil mástil.  
L: Nuttige lengte slagboom.

\*2  
(below boom only)  
(uniquement sous la barre)  
(nur unter der Schranke)  
(sólo debajo el mástil)  
(alleen onder de slagboom)





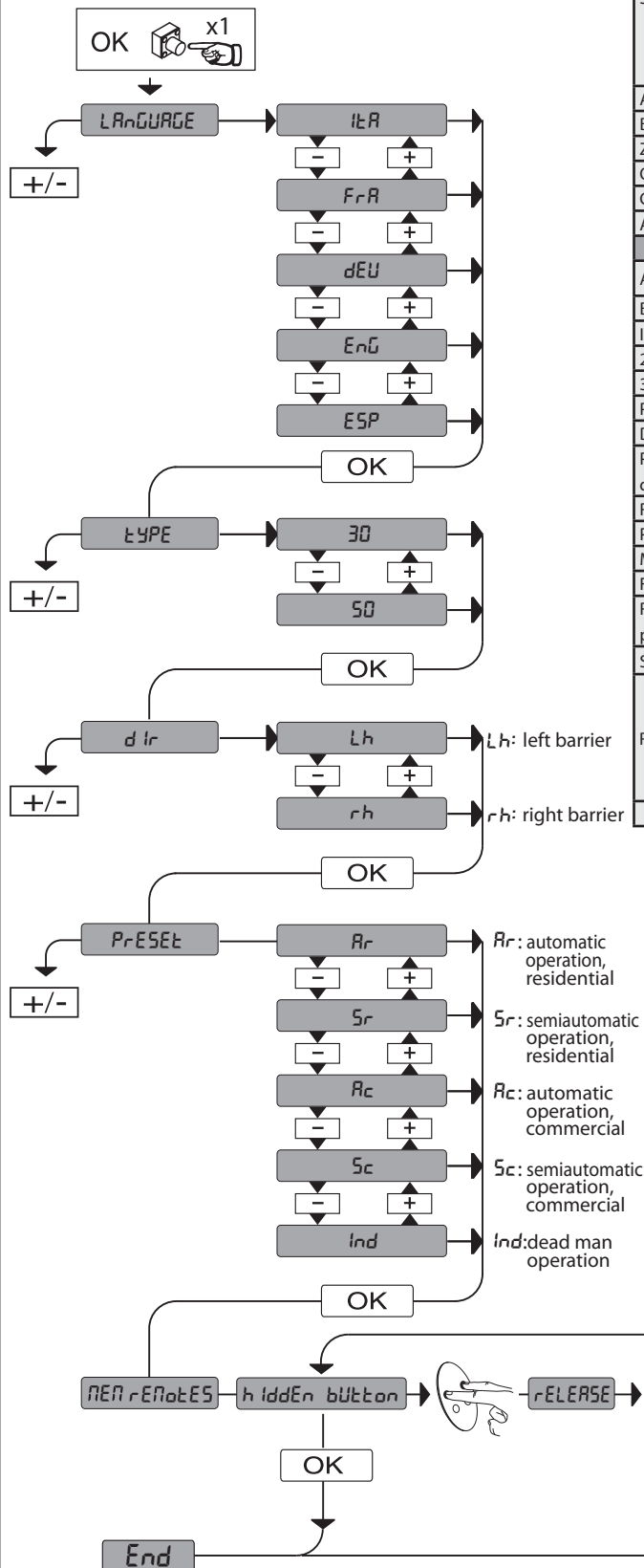
## SIMPLIFIED MENU

### LEGENDA

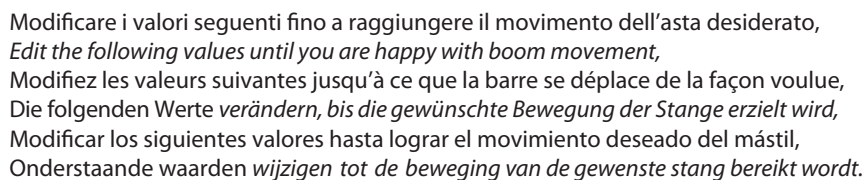


- + ↑ Scroll up
- ↓ Scroll down
- OK → Confirm/Switch on display
- + - Exit Menu

PRESET	DEFAULT	R <sub>r</sub>	S <sub>r</sub>	R <sub>c</sub>	S <sub>c</sub>	ind
PARAMETERS						
Automatic Closing Time	10	10	10	5	5	5
Opening motor torque	75	99	99	99	99	99
Closing motor torque	75	99	99	99	99	99
Speed during opening	99	99	99	99	99	99
Speed during closing	99	99	99	99	99	99
Slow-down distance	70	60 (GIOTTO BT 30/ GIOTTO S BT 30)	60 (GIOTTO BT 30/ GIOTTO S BT 30)	60 (GIOTTO BT 30/ GIOTTO S BT 30)	60 (GIOTTO BT 30/ GIOTTO S BT 30)	60 (GIOTTO BT 30/ GIOTTO S BT 30)
Alarm time	30	60	60	30	30	30
Braking	2	2	2	2	2	2
Zone	0	0	0	0	0	0
Opening value calibration	80	80	80	80	80	80
Closing value calibration	25	25	25	25	25	25
Acceleration	3	3	3	3	3	3
LOGIC						
Automatic Closing Time	ON	ON	OFF	ON	OFF	OFF
Block Pulses	ON	OFF	OFF	ON	ON	OFF
Impulse lock TCA	OFF	OFF	OFF	OFF	OFF	OFF
2 step	OFF	OFF	OFF	OFF	OFF	OFF
3 step	ON	ON	OFF	ON	OFF	OFF
Pre-alarm	OFF	OFF	OFF	ON	ON	OFF
Deadman	OFF	OFF	OFF	OFF	OFF	ON
Photocells during opening	ON	ON	ON	ON	ON	OFF
Rapid closing	OFF	OFF	OFF	OFF	OFF	OFF
Photocell test	OFF	OFF	OFF	OFF	OFF	OFF
Master/slave	OFF	OFF	OFF	OFF	OFF	OFF
Fixed code	OFF	OFF	OFF	OFF	OFF	OFF
Remote control programming	ON	ON	ON	ON	ON	ON
SCA Alarm	ON	ON	ON	OFF	OFF	ON
Reversing motion	OFF	OFF (left)	OFF (left)	OFF (left)	OFF (left)	OFF (left)
Timer on open	OFF	OFF	OFF	ON	ON	OFF





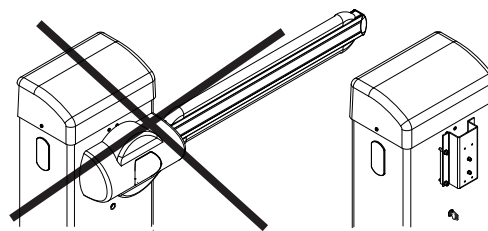




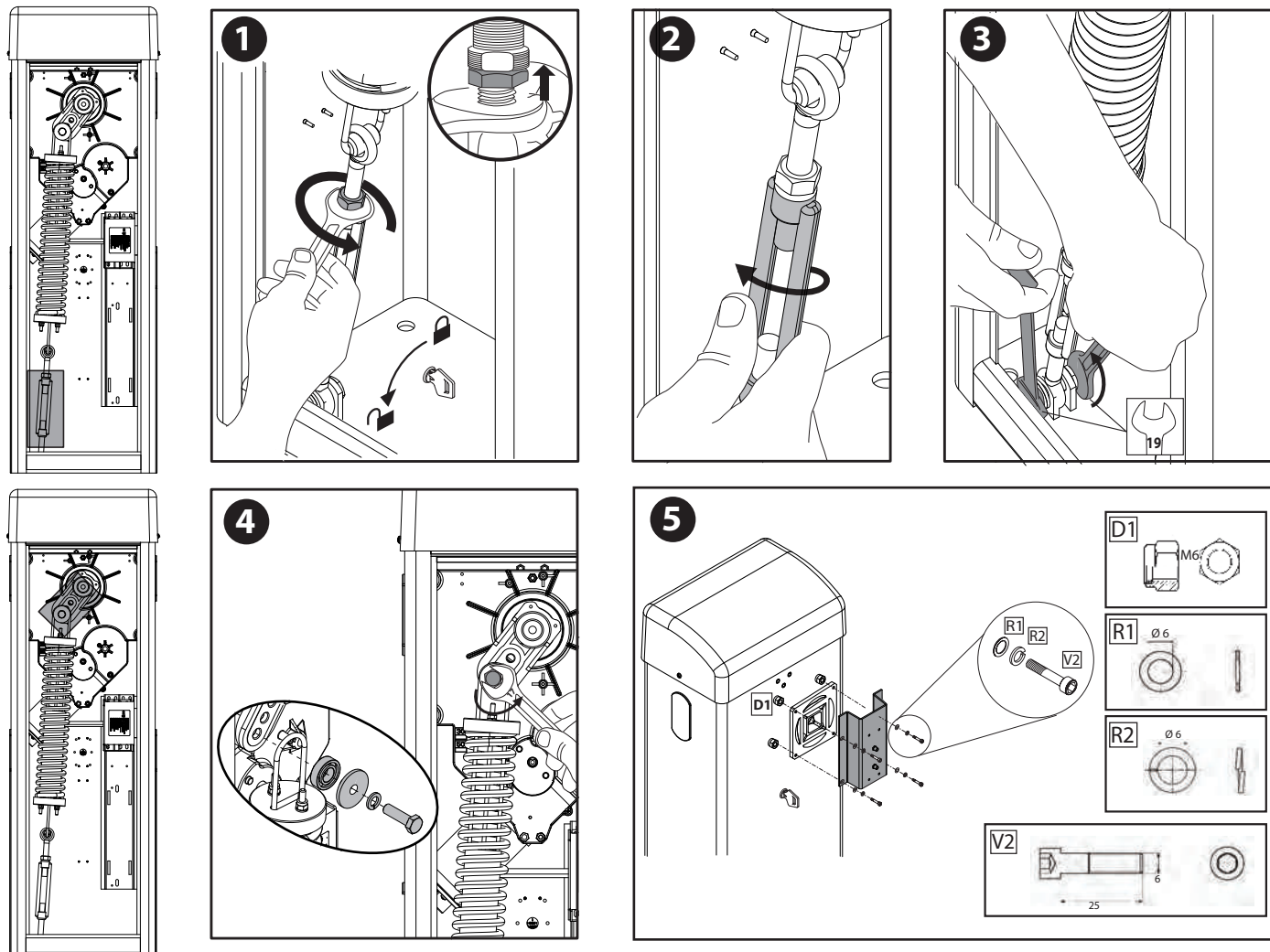
# MONTAGGIO ASTA DESTRA, ASSEMBLY OF RIGHT BOOM, MONTAGE DE LA BARRE DROITE, RECHTE MONTAGE DER STANGE, MONTAJE MÁSTIL DERECHO, MONTAGE RECHTERSTANG.

AA

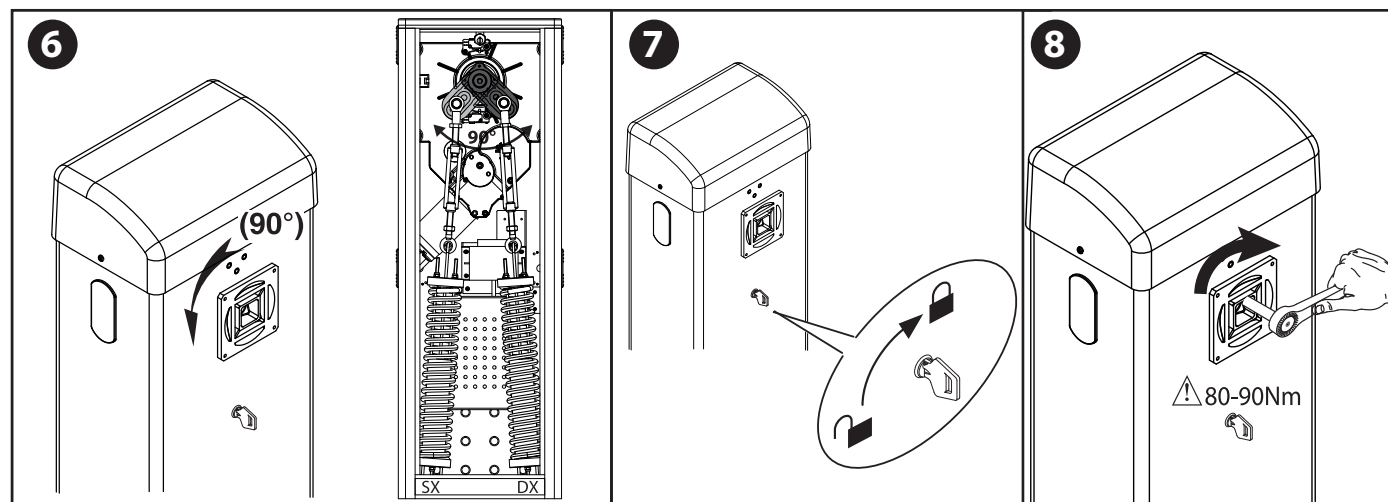
Assicurarsi che la molla non sia in tensione, e l'asta non sia montata.  
 Make sure the spring is not under tension and the boom is not fitted.  
 Vérifiez si le ressort n'est pas en tension et si la tige n'est pas montée.  
 Sicherstellen, dass die Feder nicht gespannt und die Stange nicht montiert ist.  
 Asegurarse de que el muelle no esté tensado y de que el mástil no esté montado.  
 Controleren of de veer niet onder spanning staat, en de stang niet gemonteerd is.



Smontare il gruppo molla, Remove the spring assembly, Démonter le groupe ressort, Die Feder-Baugruppe ausbauen, Desmontar el grupo muelle, De groep veer demonteren.

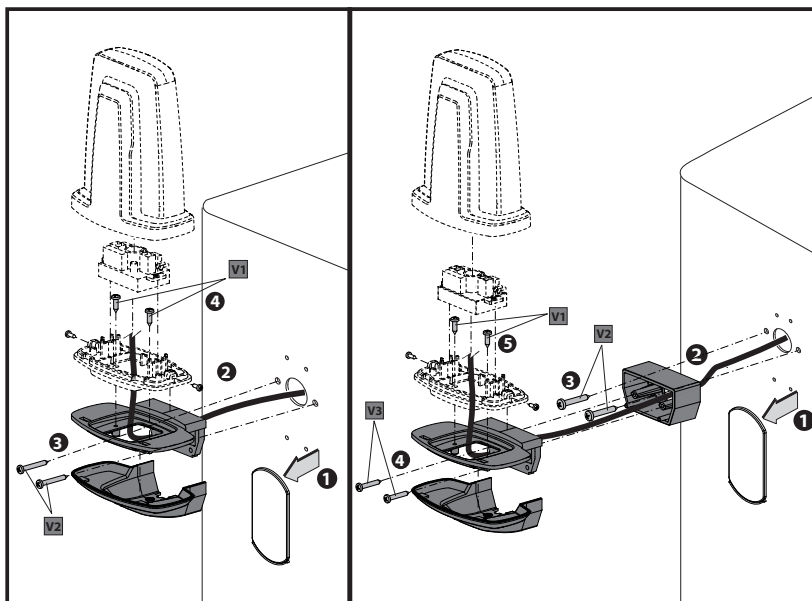
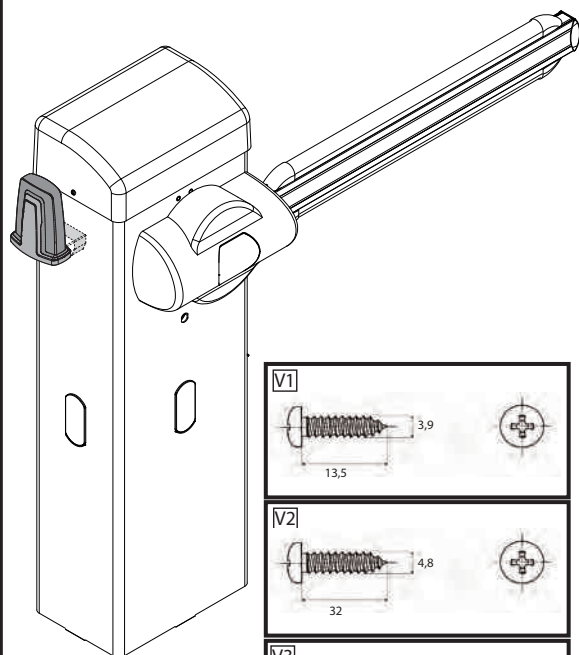


Rimontare il gruppo molla a destra, Refit the right-hand spring assembly, Remontez le groupe ressort à droite, Die Baugruppe neu montieren, Feder rechts, Volver a montar el grupo muelle a la derecha, De veergroep opnieuw rechts monteren.



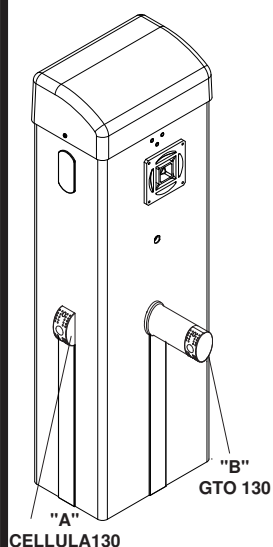
Montaggio lampeggiante, Assembling the flashing light, Montage du clignotant, Montage Blinkleuchte, Montaje luz intermitente, Montage knipperlicht.

AC

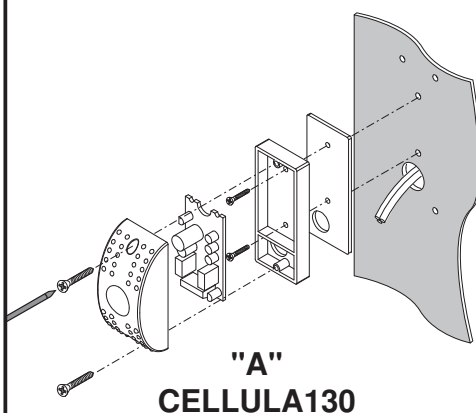


Montaggio Fotocellula Cellula 130 / GTO 130, Assembling Photocell 130/GTO 130, Montage Photocellule Cellula 130 / GTO 130, Montage Fotozelle Cellula 130 / GTO 130, Montaje Fotocélula Cellula 130 / GTO 130, Montage Fotocel Cellula 130 / GTO 130.

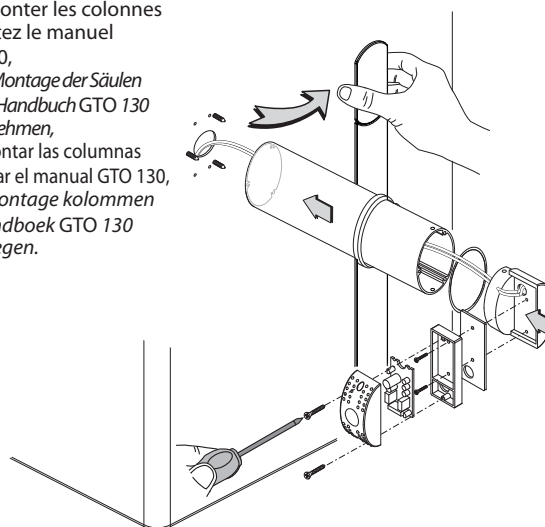
AD

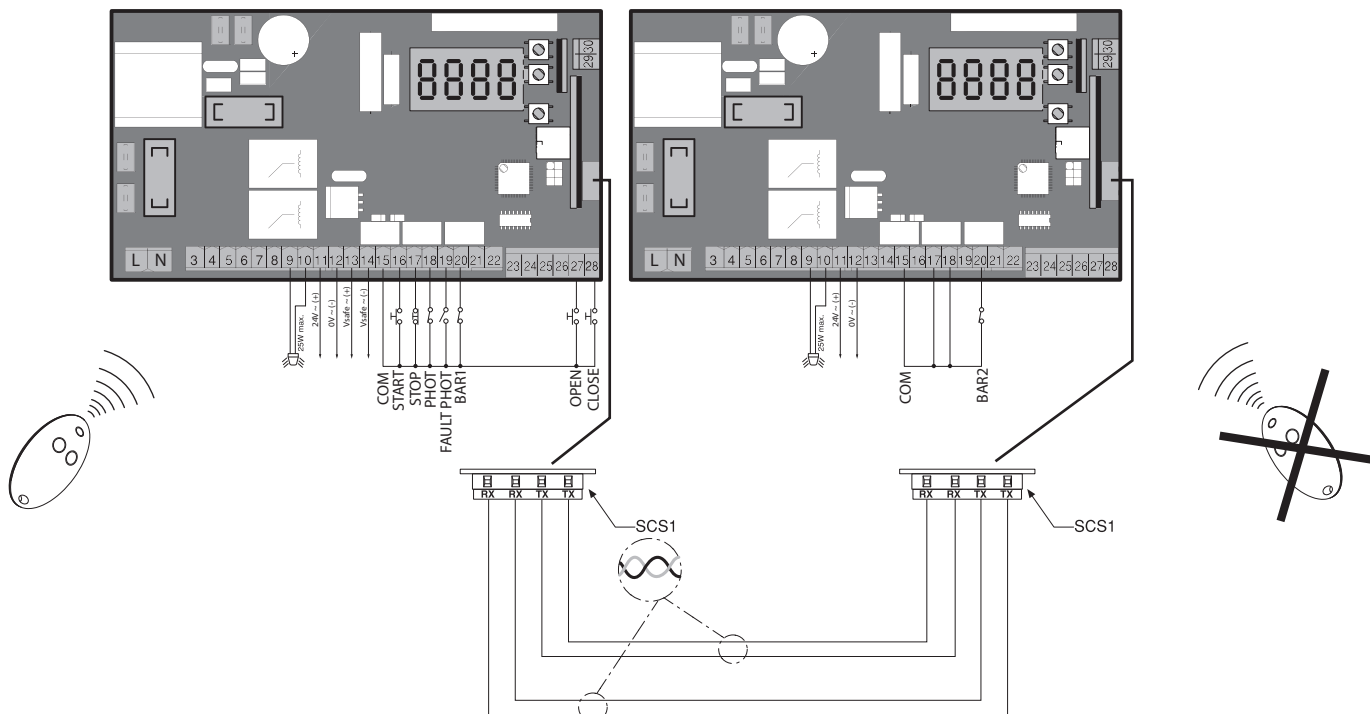
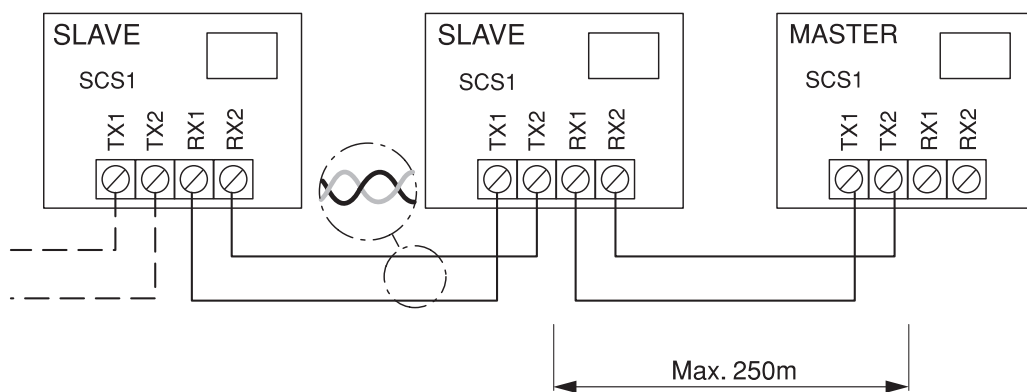


Fare riferimento al manuale Cellula 130,  
Refer to PHOTOCELL 130 manual,  
Consultez le Manuel CELLULA 130,  
Auf das Handbuch CELLULA 130 Bezug nehmen,  
Consultar el manual CELLULA 130,  
Het handboek CELLULA 130 raadplegen.

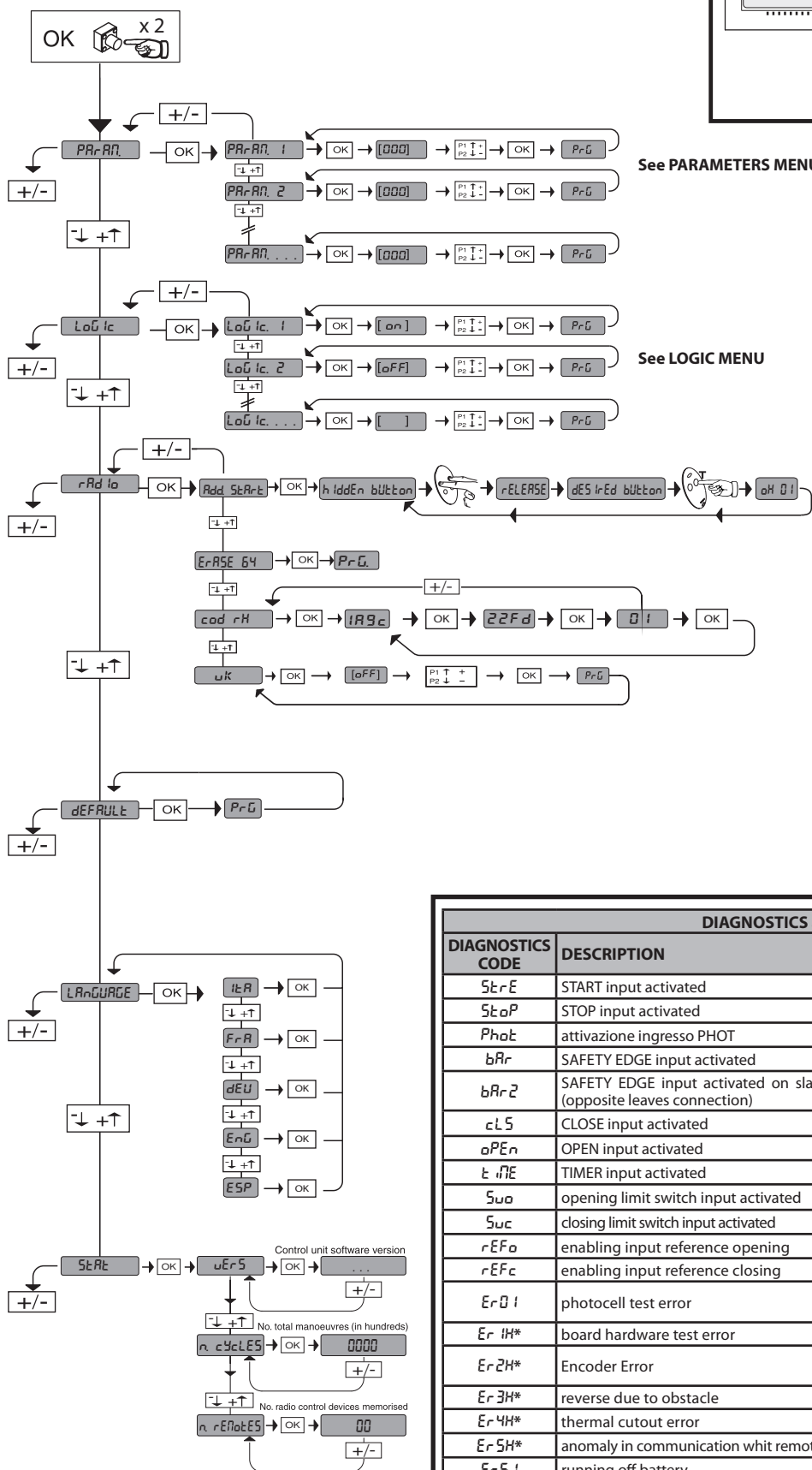
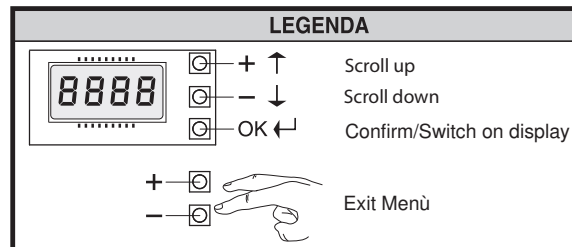


Per montaggio colonnine-  
fare riferimento al  
manuale GTO 130,  
Refer to GTO 130 manual  
for assembly of stations,  
Pour monter les colonnes  
consultez le manuel  
GTO130,  
Für die Montage der Säulen  
auf das Handbuch GTO 130  
Bezug nehmen,  
Para montar las columnas  
consultar el manual GTO 130,  
Voor montage kolommen  
het handboek GTO 130  
raadplegen.





## ACCESS TO MENUS Fig. 1



DIAGNOSTICS and WARNINGS		
DIAGNOSTICS CODE	DESCRIPTION	NOTES
StAr-t	START input activated	
StoP	STOP input activated	
PhoE	attivazione ingresso PHOT	
bAr	SAFETY EDGE input activated	
bAr-2	SAFETY EDGE input activated on slave motor (opposite leaves connection)	
cLS	CLOSE input activated	
oPEn	OPEN input activated	
tME	TIMER input activated	
SuO	opening limit switch input activated	
SuC	closing limit switch input activated	
rEFo	enabling input reference opening	
rEFc	enabling input reference closing	
Er01	photocell test error	check photocell connection and/or logic settings
Er1H*	board hardware test error	check connections to motor
Er2H*	Encoder Error	motor or signal encoder power leads inverted/disconnected
Er3H*	reverse due to obstacle	check for obstacles in path
Er4H*	thermal cutout error	Allow motor to cool
Er5H*	anomaly in communication whit remote devices	check SCS1 serial connections
Er61	running off battery	
ErFH*	limit switch error	check limit switch connections

\* H = 0,1,...,9,A,B,C,D,E,F

35.40

— Set torque threshold

— Maximum instantaneous motor torque

**WARNING! Important safety instructions. Carefully read and comply with all the warnings and instructions that come with the product as incorrect installation can cause injury to people and animals and damage to property. The warnings and instructions give important information regarding safety, installation, use and maintenance. Keep hold of instructions so that you can attach them to the technical file and keep them handy for future reference.**

## GENERAL SAFETY

This product has been designed and built solely for the purpose indicated herein. Uses other than those indicated herein might cause damage to the product and create a hazard.

- The units making up the machine and its installation must meet the requirements of the following European Directives, where applicable: 2004/108/EC, 2006/95/EC, 2006/42/EC, 89/106/EC, 99/05/EC and later amendments. For all countries outside the EEC, it is advisable to comply with the standards mentioned, in addition to any national standards in force, to achieve a good level of safety.
- The Manufacturer of this product (hereinafter referred to as the "Firm") disclaims all responsibility resulting from improper use or any use other than that for which the product has been designed, as indicated herein, as well as for failure to apply Good Practice in the construction of entry systems (doors, gates, etc.) and for deformation that could occur during use.
- Before installing the product, make all structural changes required to produce safety gaps and to provide protection from or isolate all crushing, shearing and dragging hazard areas and danger zones in general in accordance with the provisions of standards EN 12604 and 12453 or any local installation standards. Check that the existing structure meets the necessary strength and stability requirements.
- Before commencing installation, check the product for damage.
- The Firm is not responsible for failure to apply Good Practice in the construction and maintenance of the doors, gates, etc. to be motorized, or for deformation that might occur during use.
- Make sure the stated temperature range is compatible with the site in which the automated system is due to be installed.
- Do not install this product in an explosive atmosphere: the presence of flammable fumes or gas constitutes a serious safety hazard.
- Disconnect the electricity supply before performing any work on the system. Also disconnect buffer batteries, if any are connected.
- Before connecting the power supply, make sure the product's ratings match the mains ratings and that a suitable residual current circuit breaker and overcurrent protection device have been installed upline from the electrical system. Have the automated system's mains power supply fitted with a switch or omnipolar thermal-magnetic circuit breaker with a contact separation that meets code requirements.
- Make sure that upline from the mains power supply there is a residual current circuit breaker that trips at no more than 0.03A as well as any other equipment required by code.
- Make sure the earth system has been installed correctly: earth all the metal parts belonging to the entry system (doors, gates, etc.) and all parts of the system featuring an earth terminal.
- Installation must be carried out using safety devices and controls that meet standards EN 12978 and EN 12453.
- Impact forces can be reduced by using deformable edges.
- In the event impact forces exceed the values laid down by the relevant standards, apply electro-sensitive or pressure-sensitive devices.
- Apply all safety devices (photocells, safety edges, etc.) required to keep the area free of impact, crushing, dragging and shearing hazards. Bear in mind the standards and directives in force, Good Practice criteria, intended use, the installation environment, the operating logic of the system and forces generated by the automated system.
- Apply all signs required by current code to identify hazardous areas (residual risks). All installations must be visibly identified in compliance with the provisions of standard EN 13241-1.
- Once installation is complete, apply a nameplate featuring the door/gate's data.
- This product cannot be installed on leaves incorporating doors (unless the motor can be activated only when the door is closed).
- If the automated system is installed at a height of less than 2.5 m or is accessible, the electrical and mechanical parts must be suitably protected.
- Install any fixed controls in a position where they will not cause a hazard, away from moving parts. More specifically, hold-to-run controls must be positioned within direct sight of the part being controlled and, unless they are key operated, must be installed at a height of at least 1.5 m and in a place where they cannot be reached by the public.
- Apply at least one warning light (flashing light) in a visible position, and also attach a Warning sign to the structure.
- Attach a label near the operating device, in a permanent fashion, with information on how to operate the automated system's manual release.
- Make sure that, during operation, mechanical risks are avoided or relevant protective measures taken and, more specifically, that nothing can be banged, crushed, caught or cut between the part being operated and surrounding parts.
- Once installation is complete, make sure the motor automation settings are correct and that the safety and release systems are working properly.
- Only use original spare parts for any maintenance or repair work. The Firm disclaims all responsibility for the correct operation and safety of the automated system if parts from other manufacturers are used.
- Do not make any modifications to the automated system's components unless explicitly authorized by the Firm.
- Instruct the system's user on what residual risks may be encountered, on the control systems that have been applied and on how to open the system manually in an emergency, give the user guide to the end user.
- Dispose of packaging materials (plastic, cardboard, polystyrene, etc.) in accordance with the provisions of the laws in force. Keep nylon bags and polystyrene out of reach of children.

## WIRING

**WARNING!** For connection to the mains power supply, use: a multicore cable with a cross-sectional area of at least 5x1.5mm<sup>2</sup> or 4x1.5mm<sup>2</sup> when dealing with three-phase power supplies or 3x1.5mm<sup>2</sup> for single-phase supplies (by way of example, type H05 VV-F cable can be used with a cross-sectional area of 4x1.5mm<sup>2</sup>). To connect auxiliary equipment, use wires with a cross-sectional area of at least 0.5 mm<sup>2</sup>.

- Only use pushbuttons with a capacity of 10A-250V or more.
- Wires must be secured with additional fastening near the terminals (for example, using cable clamps) in order to keep live parts well separated from safety extra low voltage parts.
- During installation, the power cable must be stripped to allow the earth wire to be connected to the relevant terminal, while leaving the live wires as short as possible. The earth wire must be the last to be pulled taut in the event the cable's fastening device comes loose.

**WARNING!** safety extra low voltage wires must be kept physically separate from low voltage wires.

Only qualified personnel (professional installer) should be allowed to access live parts.

## CHECKING THE AUTOMATED SYSTEM AND MAINTENANCE

Before the automated system is finally put into operation, and during maintenance work, perform the following checks meticulously:

- Make sure all components are fastened securely.
- Check starting and stopping operations in the case of manual control.
- Check the logic for normal or personalized operation.
- For sliding gates only: check that the rack and pinion mesh correctly with 2 mm of play along the full length of the rack; keep the track the gate slides on clean and free of debris at all times.
- For sliding gates and doors only: make sure the gate's running track is straight and horizontal and that the wheels are strong enough to take the weight of the gate.
- For cantilever sliding gates only: make sure there is no dipping or swinging during operation.
- For swing gates only: make sure the leaves' axis of rotation is perfectly vertical.
- Check that all safety devices (photocells, safety edges, etc.) are working properly and that the anti-crush safety device is set correctly, making sure that the force of impact measured at the points provided for by standard EN 12445 is lower than the value laid down by standard EN 12453.
- Impact forces can be reduced by using deformable edges.
- Make sure that the emergency operation works, where this feature is provided.
- Check opening and closing operations with the control devices applied.
- Check that electrical connections and cabling are intact, making extra sure that insulating sheaths and cable glands are undamaged.
- While performing maintenance, clean the photocells' optics.
- When the automated system is out of service for any length of time, activate the emergency release (see "EMERGENCY OPERATION" section) so that the operated part is made idle, thus allowing the gate to be opened and closed manually.
- If the power cord is damaged, it must be replaced by the manufacturer or their technical assistance department or other such qualified person to avoid any risk.
- If "D" type devices are installed (as defined by EN12453), connect in unverified mode, foresee mandatory maintenance at least every six months

## WARNING!

Remember that the drive is designed to make the gate/door easier to use and will not solve problems as a result of defective or poorly performed installation or lack of maintenance

## SCRAPPING

Materials must be disposed of in accordance with the regulations in force. There are no particular hazards or risks involved in scrapping the automated system. For the purpose of recycling, it is best to separate dismantled parts into like materials (electrical parts - copper - aluminium - plastic - etc.).

## DISMANTLING

If the automated system is being dismantled in order to be reassembled at another site, you are required to:

- Cut off the power and disconnect the whole electrical system.
- Remove the actuator from the base it is mounted on.
- Remove all the installation's components.
- See to the replacement of any components that cannot be removed or happen to be damaged.

**Anything that is not explicitly provided for in the installation manual is not allowed. The operator's proper operation can only be guaranteed if the information given is complied with. The Firm shall not be answerable for damage caused by failure to comply with the instructions featured herein.**

**While we will not alter the product's essential features, the Firm reserves the right, at any time, to make those changes deemed opportune to improve the product from a technical, design or commercial point of view, and will not be required to update this publication accordingly.**



## 2) GENERAL OUTLINE

Compact electromechanical barrier suitable for limiting private areas, parkings, access areas for vehicles only. Available for passageways from 3 to 5 metres. Adjustable electronic limit switches, they guarantee correct boom stopping position.

The emergency release device for manual manoeuvre is controlled by a personalised key lock.

The actuator is always supplied for left-hand side fitting. However, when necessary, the opening direction can be reversed by means of simple operations.

The CBO mod. foundation base (on request) makes barrier installation easier. Appropriate fittings make it easy to install accessories.

The **LIBRA-C-G/LIBRA-C-GS** control panel is supplied by the manufacturer with standard setting. Any change must be set by means of the incorporated display or by means of the universal programmer.

## 3) TECHNICAL SPECIFICATIONS

MOTOR	
Power supply	230V±10% 50Hz(*)
Power absorbed	300W (GIOTTO S BT 30/ GIOTTO S BT 50) 250W (GIOTTO BT 30/ GIOTTO BT 50)
Internal lubrication	permanent grease
Max torque	280 Nm (GIOTTO S BT 30)
	380 Nm (GIOTTO S BT 50)
	250 Nm (GIOTTO BT 30)
	350 Nm (GIOTTO BT 50)
Opening time	2,5s (GIOTTO S BT 30)
	4s (GIOTTO S BT 50 / (GIOTTO BT 30)
	5s (GIOTTO BT 50)
Boom length	3 m (GIOTTO S BT 30/ GIOTTO BT 30)
	5 m (GIOTTO S BT 50/ GIOTTO BT 50)
	6 m [(GIOTTO BT 50/ GIOTTO S BT 50) + ATG6]
Manual mechanical release	customised key
Type of boom	rectangular
Limit devices	electrical incorporated and electronically adjustable
Type of use	intensive (GIOTTO S BT 30/ GIOTTO S BT 50)
	semi intensive (GIOTTO BT 30/ GIOTTO BT 50)
Working temperature	from -20°C to +55°C
Degree of protection	IP 54
Operator weight (without boom)	41 Kg (GIOTTO S BT 30 / (GIOTTO BT 50)
	42 Kg (GIOTTO S BT 50)
	40 Kg (GIOTTO BT 30)
Dimensions	see fig. A
CONTROL UNIT	
Mains/low voltage insulation	> 2MOhm 500V~
Dielectric strength	mains/low voltage 3750V~ for 1 minute
Supply to accessories	24V~ (180 mA max absorption)
Barrier-open warning light	24V~ 3W max
Blinker	24V~ 25W max
Fuses	see Fig. G
N° of combinations	4 billion
Built-in Rolling-Code radio-receiver	frequency 433.92MHz
Max. n° of remotes that can be memorized	63
Setting of parameters and options	Universal handheld programmer/LCD display

(\*)= special power supply voltages on request.

Usable transmitter versions:

All ROLLING CODE transmitters compatible with: 

4.1) FOUNDATION PLATE (Fig. B1).

4.2) FASTENING ANCHOR BOLTS (Fig. B2).

## 5) FITTING OF THE ACTUATOR

**WARNING!** The barrier must be exclusively used for vehicles to drive through. Pedestrians must not walk within the operator manoeuvring area. An appropriate pedestrian passageway must be provided for.

The passageway must be suitably indicated by means of the warning signs illustrated in Fig.A.

**WARNING:** before opening the door, the spring must be unloaded

(vertical boom). The door of the box must be facing towards the inside of the property. When you stand in the middle of the passageway, facing outwards, if the box is on your left, the barrier is left-hand fitted, if the box is on your right, the barrier is right-hand fitted.

**The actuator is always supplied for left-hand side fitting.**

## 6) Left-hand fitting (Fig. A, B, C, D).

## 7) Right-hand fitting (Fig. AA)

- Carry out bar balancing.

- Set the Direction Reversal logic to ON in the control panel.

**Warning:** the Direction Reversal logic must be configured to OFF for left-hand fitted barriers, and to ON for right-hand fitted barriers. Otherwise, the limit devices will not operate or an encoder direction error will be displayed.

## 8) BAR BALANCING (Fig. F).

## 9) OPTIONAL ACCESSORIES (Fig.E)

- Foundation base CBO
- Photocell 130 fastening post kit KIT GTO 130
- Fixed end rest for boom FAF
- Folding leg to support boom GA
- Cushioned folding leg to support boom GAMA
- Skirt ready assembled on boom SB
- Safety edge BIR
- Lights kit for booms between 3m and 4.5m long KIT GTO LIGHT 3
- Lights kit for booms 5m or 6m long KIT GTO LIGHT 5
- Top or bottom boom covering profile PCA
- ELL ART Articulated Boom
- KIT BAT
- RMM
- THERMO
- GTO ATG-GTO AQG
- ATG 3-ATG 5 -ATG 6
- AQG 3-AQG 5

## 10) Accessories: boom length limits and balancing (Fig. E1).

For further information about the installation and use of accessories, refer to the respective instruction manuals.

## 11) Assembling the flashing light RADIUS B LTA24R1/ RADIUS B LTA24R2. (FIG. AC)

- Complete assembly and wiring as directed in instructions provided for RADIUS B LTA24R1/ RADIUS B LTA24R2.

## 12) Assembling Photocell 130 / GTO 130 (FIG. AD).

## 13) ELECTRICAL INSTALLATION SET-UP

**WARNING: before opening the door, the spring must be unloaded (vertical boom).** Set up the electrical installation (fig. A) with reference to the current regulations for electrical installations. Keep the mains power supply connections definitely separate from the service connections (photocells, electric edges, control devices etc.).

Fig. A shows the number of connections and section for a 100m length of power supply cables; for greater lengths, calculate the section for the true automation load. When the auxiliary connections exceed 50 metre lengths or go through critical disturbance areas, it is recommended to decouple the control and safety devices by means of suitable relays.

The main automation components are (fig. A):

- Type-approved adequately rated omnipolar circuit-breaker with at least 3,5 mm contact opening, provided with protection against overloads and short circuits, suitable for cutting out automation from the mains. Place, if not already installed, a type-approved differential switch with a 0.03A threshold just before the automation system.
- Control panel and incorporated receiver.
- Key selector.
- Blinker
- Actuators.
- Bar.
- Rest fork.
- Electric edge.
- Pair of photocells.
- Photocell post.
- 1-2-4 channel transmitter.
- Inductive metal mass detector (Fig. C1).
- Mass detector loops.

## 14) CONNECTION (Fig. G)

Once suitable electric cables have been run through the raceways and the automated device's various components have been fastened at the predetermined points, the next step is to connect them as directed and illustrated in the diagrams contained in the relevant instruction manuals. Connect the live, neutral and earth wire (compulsory). The mains cable must be clamped in the relevant cable gland, and the accessories' wires in the cable gland, while the earth wire with the yellow/green-coloured

sheath must be connected in the relevant terminal.

**WARNING:** The electrical connections must be carried out workmanlike by qualified experienced personnel, in conformity with all the current standards and with the use of appropriate materials.

Lay out the electrical installation with reference to the current electrical standards.

Keep the mains supply connections clearly separated from the service connections.

In the initial section of the electrical installation, fit a circuit breaker with a contact opening distance equal to or greater than 3,5 mm, provided with magnetothermal protection and a differential switch having adequate capacity for the appliance consumption. For the wiring, only use cables conforming to the harmonised or national standards, having a cross section corresponding to the initial protection, the appliance consumption and the installation conditions, for example a 3x1.5 sq mm (H 05 VV-F) cable.

TERMINAL	DESCRIPTION
1-2	Control for cooling fan 230V~ ±10% (1=L) (2=N)
3-4	Not used
6-7	Motor connections
15-5	Motor connections, closing reference
15-8	Motor connections, opening reference
9-10	Flashing light (24 V~, 25W)
11-12	Accessories power supply: 24 V operation with mains power on. 24 V (11+,12-) operation with no mains power and optional buffer battery kit.
13-14	Safety device power supply output (photocell transmitter). <b>N.B.: output active only during operating cycle.</b> 24 V Vsafe operation with mains power on. 24 V (13+,14-) Vsafe operation with no mains power and optional buffer battery kit.
15-16	<b>START</b> button (N.O.) This option can be set via the "logic menu". Start - operation according to 2-3-4 step logic.
15-17	<b>STOP</b> input (N.C.) The command stops movement. If not used, leave jumper inserted.
15-18	<b>PHOTOCELL</b> input (N.C.) Operation according to photocell during opening logic. If not used, leave jumper inserted.
19	Safety device test input <b>FAULT - PHOT</b> (N.O.).
15-20	<b>SAFETY EDGE</b> input <b>BAR</b> (N.C.). The command reverses movement during closing and stops movement during opening. If not used, leave jumper inserted.
21-22	Barrier-open warning light output (N.O. contact, 24V~/3W max) or, in alternative, alarm output (see Table "B", Alarm SCA) and Connection To Parky Car-Park Management System
23-24-25-26	Encoder inputs
15-27	<b>OPEN/ TIMER</b> control button (N.O.) Open - Gate opened with this command. Timer - If the contact is closed, the leaves open and stay open until the contact is opened. If the contact connected is open, the leaves close and are ready for normal operation.
15-28	Close button <b>CLOSE</b> (N.O.) The command causes the leaf to close.

## 15) SAFETY DEVICES FIG. H

**Note: only use receiving safety devices with free changeover contact.**

### 15.1) NON-TESTED DEVICES FIG. H1

### 15.2) TESTED DEVICES FIG. H2, H3

## 16) ADJUSTMENTS

### RECOMMENDED ADJUSTMENT SEQUENCE:

Adjusting the limit switches Fig.I (See reference section)  
Programming remote controls  
Setting of parameters/logic, where necessary


## 17) PARAMETERS MENU (PRr Rr)

### (TABLE "A" PARAMETERS)

## 18) LOGIC MENU (LoG ic)

## (TABLE "B" LOGIC)

### 19) RADIO MENU (rAd io)

Logic	Description
Add Start	<b>Add Start Key</b> associates the desired key with the Start command
Erase	<b>Erase List</b>  <b>WARNING!</b> Erases all memorized remote controls from the receiver's memory.
code	<b>Read receiver code</b> Displays receiver code required for cloning remote controls.
uk	<b>ON</b> = Enables remote programming of cards via a previously memorized W LINK transmitter. It remains enabled for 3 minutes from the time the W LINK remote control is last pressed. <b>OFF</b> =W LINK programming disabled.

### - IMPORTANT NOTE: THE FIRST TRANSMITTER MEMORIZED MUST BE IDENTIFIED BY ATTACHING THE KEY LABEL (MASTER).

In the event of manual programming, the first transmitter assigns the RECEIVER'S KEY CODE: this code is required to subsequently clone the radio transmitters.

The Clonix built-in on-board receiver also has a number of important advanced features:

- Cloning of master transmitter (rolling code or fixed code)
- Cloning to replace transmitters already entered in receiver
- Transmitter database management
- Receiver community management

To use these advanced features, refer to the universal handheld programmer's instructions and to the CLONIX Programming Guide, which come with the universal handheld programmer device.

### 20) DEFAULT MENU (dEFAULt)

Restores the controller's default factory settings.

### 21) LANGUAGE MENU (LAnGUAGE)

Used to set the programmer's language on the display.

### 22) STATISTICS MENU

Shows:

- board version
- number of total manoeuvres made by the automation
- number of remote controls saved to the built-in receiver

### 23) CONNECTION TO PARKY CAR-PARK MANAGEMENT SYSTEM

The board can be configured in order to make an output available for controlling the barrier status. When the SCA Alarm logic is disabled (OFF) and the Alarm Time parameter is set to 0 s, the SCA contact (21-22) is configured as follows (Fig. G):

- contact **closed** between terminals **21-22** with the barrier **lowered**
- contact **open** between terminals **21-22** with the barrier **lifted**

#### 23.1) SERIAL CONNECTION USING SCS1 BOARD (Fig. AE)

The **LIBRA-C-G/LIBRA-C-GS** control panel allows several automation units (SCS1) to be connected in a centralised way by means of appropriate serial inputs and outputs. This makes it possible to use one single command to open and close all the automation units connected.

Following the diagram in Fig. AE, proceed to connecting all the **LIBRA-C-G/LIBRA-C-GS** control panels, exclusively using a telephone-type line. Should a telephone cable with more than one pair be needed, it is indispensable to use wires from the same pair.

**The length of the telephone cable between one appliance and the next must not exceed 250 m.**

At this point, each of the **LIBRA-C-G/LIBRA-C-GS** control panels must be appropriately configured, by setting a MASTER unit first of all, which will have control over all the others, to be necessarily set as SLAVE (see logic menu).

Also set the Zone number (see parameter menu) between 0 and 127.

The zone number allows you to create groups of automation units, each one answering to the Zone Master unit. **Each zone can only be assigned one Master unit, the Master unit in zone 0 also controls the Slave units in the other zones. WARNING: the control panel set as the master must be the first in the series.**

#### 23.2) Opposite Barriers (Fig. AF)

By means of a serial connection, it is also possible to obtain centralised control of two opposite barriers/gates.

In this case, the Master M1 control panel will simultaneously manage closing and opening for the Slave M2 control panel.

SETTING REQUIRED FOR OPERATION:

- MASTER board: Zone=128, rRSEr=ON
- SLAVE board: Zone=128, rRSEr=OFF

WIRING REQUIRED FOR OPERATION:

- The MASTER and SLAVE control units are interconnected through the



- 4 wires (RX/TX) for the SCS1 interface boards;
- All the activation controls, as well as the remote controls must refer to the MASTER board;
  - All the photocells must be connected to the MASTER control panel;
  - The safety edges of the MASTER leaf must be connected to the MASTER control unit;
  - The safety edges of the SLAVE leaf must be connected to the SLAVE control unit.

## 24) LIMIT SWITCH SETTING

**WARNING: before opening the door, the spring must be unloaded (vertical boom).** The barrier is provided with programmable electronic limit switches and mechanical stop devices. There must be a rotation margin (about 1°) on closing and opening between the electrical limit switches and mechanical stop devices (Fig. J). To evaluate correctly the values set, you are advised to carry out a few complete consecutive manoeuvres.

## 25) EMERGENCY RELEASE (Fig. Y)

**WARNING!** When an actuator without bar needs to be released, ensure that the balancing spring is not compressed (bar in the opening position).

## 26) MALFUNCTION: CAUSES and REMEDIES

### 26.1) The bar does not open. The motor does not turn.

**WARNING: before opening the door, the spring must be unloaded**

### (vertical boom).

- 1) Check that the photocells are not dirty, or engaged, or not aligned. Proceed accordingly. Check the electric edge.
- 2) Check the correct connection of the drive motor and capacitor.
- 3) Check that the electronic appliance is correctly supplied. Check the integrity of the fuses.
- 4) Use the control unit self-diagnosis (see "Acces to Menus"), to check whether the functions are correct. Identify any possible cause for the fault. If self-diagnosis indicates that a start command persists, check that there are no radio transmitters, start buttons or other control devices keeping the start contact activated (closed).
- 5) If the control unit does not work, it must be replaced.
- 6) Check the activation of the reference microswitches by checking the messages appearing on the control panel display.
- 7) Lubrificate the guide-ressort tirants in case of rumors or vibrations.

### 26.2) The bar does not open. The motor turns but there is no movement.

- 1) The manual release was left engaged. Reset the motorised operation.
- 2) If the release is in the motorised operation position, check the gearmotor for integrity.

TABLE "A" - PARAMETERS MENU - (PArRM)

PARAMETERS	min.	max.	default	Definition	Description
t <sub>cl</sub> R	0	180	10	<b>Automatic Closing Time</b>	Automatic Closing Time [s] Set the numerical value of the automatic closing time.
oP. t <sub>SLow</sub>	40	99	75	<b>Opening motor torque</b>	Opening torque [%] Sets sensitivity to obstacles during opening (1=max., 99=min.)
cLSt <sub>SLow</sub>	40	99	75	<b>Closing motor torque</b>	Closing torque [%] Sets sensitivity to obstacles during closing (1=max., 99=min.)
oP. SP <sub>EE</sub> d	15	99	99	<b>Speed during opening</b>	Running speed during opening [%] Sets the running speed that the barrier must reach during opening, as a percentage of the maximum speed the actuator can reach.
cL SP <sub>EE</sub> d	15	99	99	<b>Speed during closing</b>	Running speed during closing [%] Sets the running speed that the barrier must reach during closing, as a percentage of the maximum speed the actuator can reach.
ALArM t <sub>IME</sub>	0	240	30	<b>Alarm time</b>	Alarm time [%] In the case of obstacle detection or photocell engagement for a period exceeding the time set (ranging from 10 s to 240 s), the SCA contact closes. The contact is subsequently opened by the STOP command or by triggering of the closing limit switch. Only active when the SCA Alarm logic is set to OFF. If set to 0 s, the SCA contact becomes a connection to the Parky system (see Paragraph Connection To Parky Car-Park Management System).
brAKE	1	10	2	<b>Braking</b>	Braking [%] Set the braking rate to be applied while the barrier is stopping.
ZonE	0	128	0	<b>Zone</b>	Zone [] Set the zone number between a minimum value of 0 and a maximum value of 128.
oPEn.cALib. (Special par. 1)*	0	100	80	<b>Opening value calibration</b>	Opening value calibration [%] Set the reference value from 0,0 to 100,0 for the required opening position (see Paragraph Limit Switch Setting).
cLoScALib. (Special par. 2)*	0	100	25	<b>Closing value calibration</b>	Closing value calibration [%] Set the reference value from 0,0 to 100,0 for the required closing position (see Paragraph Limit Switch Setting).
AccEL. (Special par. 6)*	1	10	3	<b>Acceleration</b>	Acceleration [%] Set the acceleration to be applied at the beginning of each movement.
dSt. dEcEL (Special par. 18)*	0	99	70	<b>Slow-down distance</b>	Slow-down distance [%] Set the distance the barrier needs to go from high to low speed in percentage to total travel.

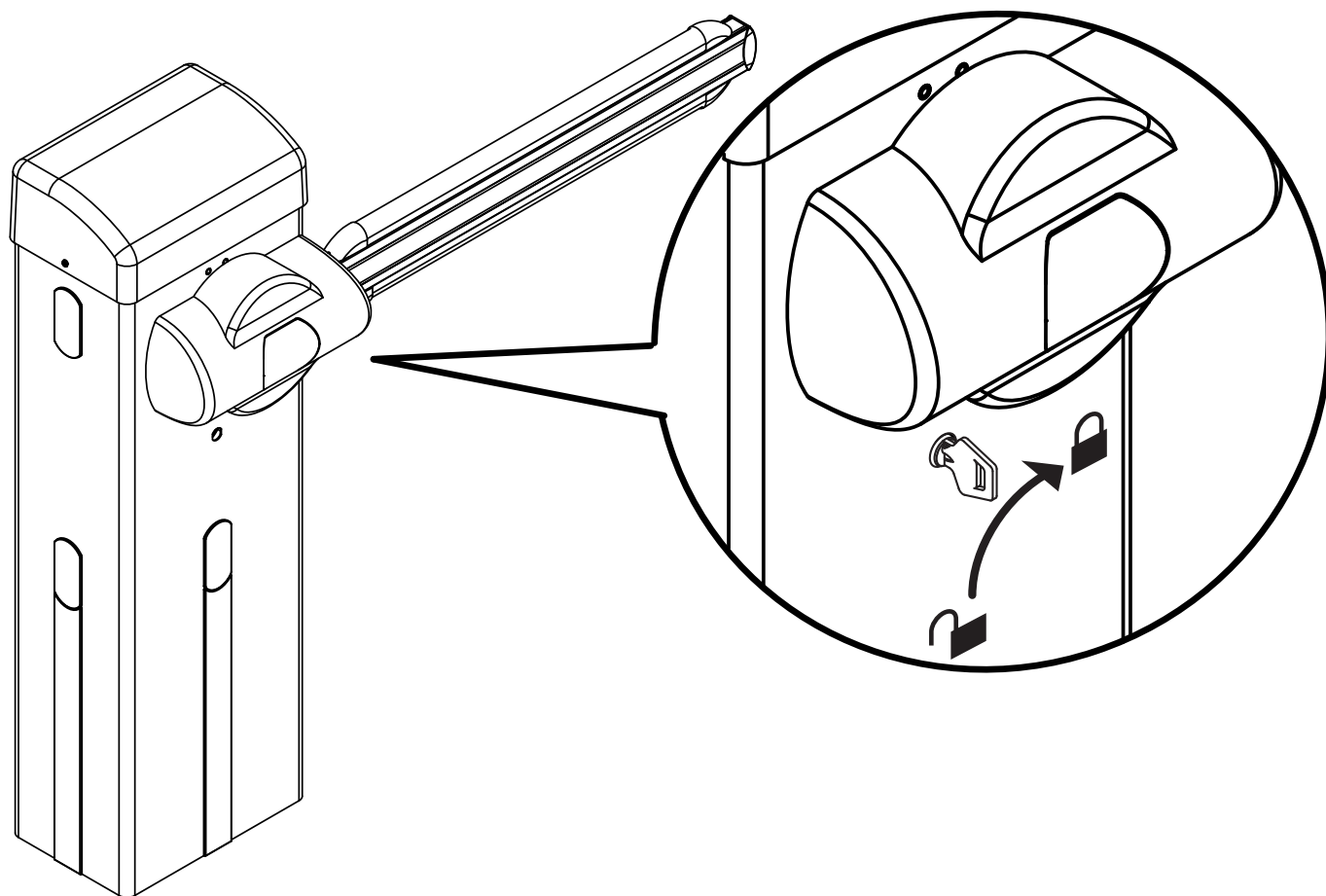
\*=Refer for universal handheld programmer.

**TABLE B: LOGIC MENU (Logic)**

Logic	Default	Definition	Cross out setting used	Description		
Auto	ON	Automatic Closing Time	ON	Switches automatic closing on.		
			OFF	Switches automatic closing off.		
Block OPEN	ON	Block Pulses	ON	The start pulse has no effect during opening.		
			OFF	The start pulse has effect during opening or closing.		
Block Auto	OFF	Impulse lock TCA	ON	The Start impulse has no effect during the TCA dwell period.		
			OFF	The Start impulse becomes effective during the TCA dwell period.		
2 STEP	OFF	2 step	ON	Enables the 2-step logic (prevails over the "3-step logic").		
			OFF	Disables the 2-step logic, activating the 4-step logic if the "3-step logic" is OFF.		
3 STEP	ON	3 step	ON	Enables the 3-step logic (if the "2-step logic" is OFF).		
			OFF	Disables the 3-step logic, activating the 4-step logic if the "2-step logic" is OFF.		
			Response to the START impulse			
			Barrier	2 steps	3 steps	4 steps
			closed	opens	opens	opens
on closing	stop					
open	closes	closes	closes			
on opening			stop + TCA	stop + TCA		
after stop	opens	opens	opens			
Pre-AL	OFF	Pre-alarm	ON	The flashing light comes on approx. 3 seconds before the motors start.		
			OFF	The flashing light comes on at the same time as the motors start.		
hold to run	OFF	Deadman	ON	Hold-to-run operation: the manoeuvre continues as long as the OPEN and CLOSE control keys are kept pressed. The radio transmitter cannot be used.		
			OFF	Normal impulse operation.		
Photo.c.OPEN	ON	Photocells during opening	ON	When beam is broken, operation of the photocell is switched off during opening. During closing, movement is reversed immediately.		
			OFF	When beam is broken, photocells are active during both opening and closing. When beam is broken during closing, movement is reversed only once the photocell is cleared.		
FAST CLS	OFF	Rapid closing	ON	Closes barrier after photocell disengagement, before waiting for the end of the TCA (automatic closing time) set.		
			OFF	Command not entered.		
TEST Phot	OFF	Photocell test	ON	Switches photocell testing on		
			OFF	Switches photocell testing off If disabled (OFF), it inhibits the photocell testing function, enabling connection of devices not equipped with supplementary test contacts.		
MASTER	OFF	Master/slave	ON	Control panel is set up as the Master unit in a centralized serial connection system.		
			OFF	Control panel is set up as a Slave unit in a centralized serial connection system.		
Fixed code	OFF	Fixed code	ON	Receiver is configured for operation in fixed-code mode.		
			OFF	Receiver is configured for operation in rolling-code mode.		
Radio Prog	ON	Remote control programming	ON	Enables wireless memorizing of transmitters: 1- Press in sequence the hidden key (P1) and normal key (T1-T2-T3-T4) of a transmitter that has already been memorized in standard mode via the radio menu. 2- Press within 10 secs. the hidden key (P1) and normal key (T1-T2-T3-T4) of a transmitter to be memorized. The receiver exits programming mode after 10 secs.: you can use this time to enter other new transmitters. This mode does not require access to the control panel. <b>IMPORTANT: Enables the automatic addition of new transmitters, clones and replays.</b>		
			OFF	Disables wireless memorizing of transmitters. Transmitters are memorized only using the relevant Radio menu. <b>IMPORTANT: Disables the automatic addition of new transmitters, clones and replays.</b>		
ALARm SCA	ON	SCA Alarm	ON	The SCA contact (terminals 21-22) behaves as follows: - with barrier open and on opening: contact closed (warning light on) - with barrier closed:contact open: (warning light off) - on closing: intermittent contact (blinking)		
			OFF	The SCA contact closes according to the modes set by the Alarm Time parameter.		
changing Mot.	OFF	Reversing motion	ON	Change this parameter if the opening direction needs to be changed		
			OFF	Standard operating mode.		
OPEN-timer (special dip 2*)	OFF	TIMER su OPEN	ON	Input between terminals 15-27 works as TIMER.		
			OFF	Input between terminals 15-27 works as OPEN.		

\*=Refer for universal handheld programmer.

**Fig. Y**



MANUALE - MANUAL - MANUEL

BEDIENTUNGSANLEITUNG - MANUAL - HANDMATIG



AUTOMATICO - AUTOMATIC - AUTOMATIQUE

AUTOMATIK - AUTOMÁTICO - AUTOMATISCH