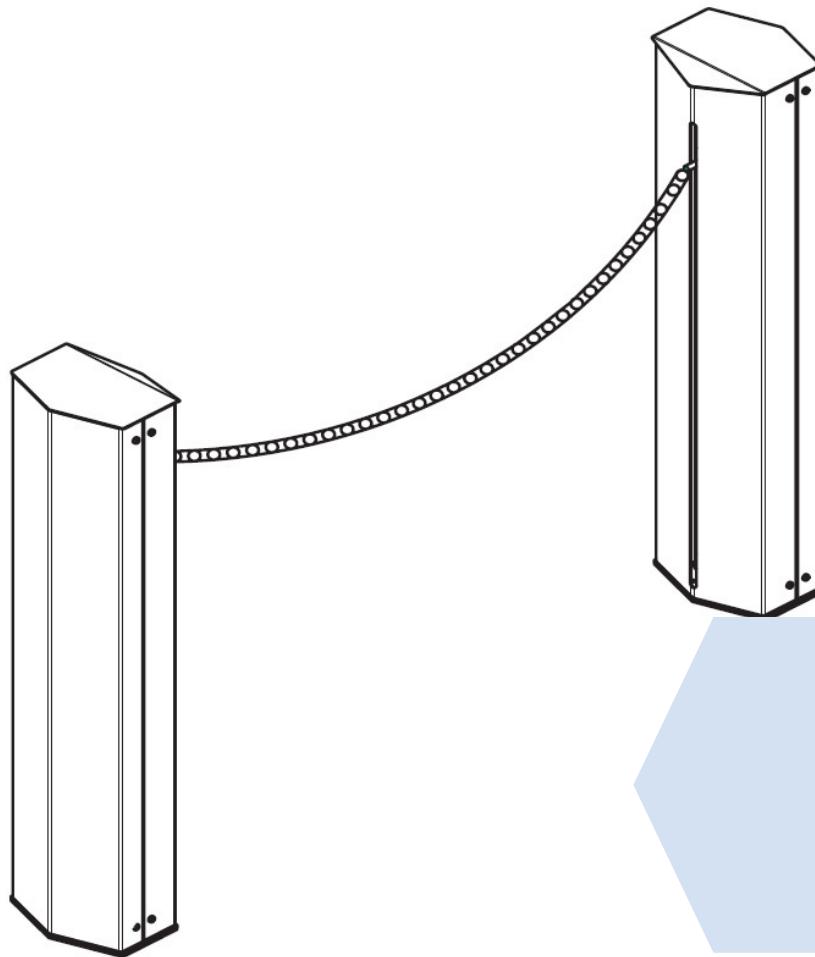




PARKLIO™ CHAIN USER MANUAL

# PARKLIOT™ CHAIN

## USER MANUAL





PARKLIO™ CHAIN USER MANUAL

Thank you for the confidence you have shown us by purchasing our product.

**Please read this manual first!**

Dear Customers,

We hope that all your expectations of this product will be fulfilled. Parklio™ Chain  
is manufactured using the latest technologies and has undergone rigorous  
quality control  
procedures.

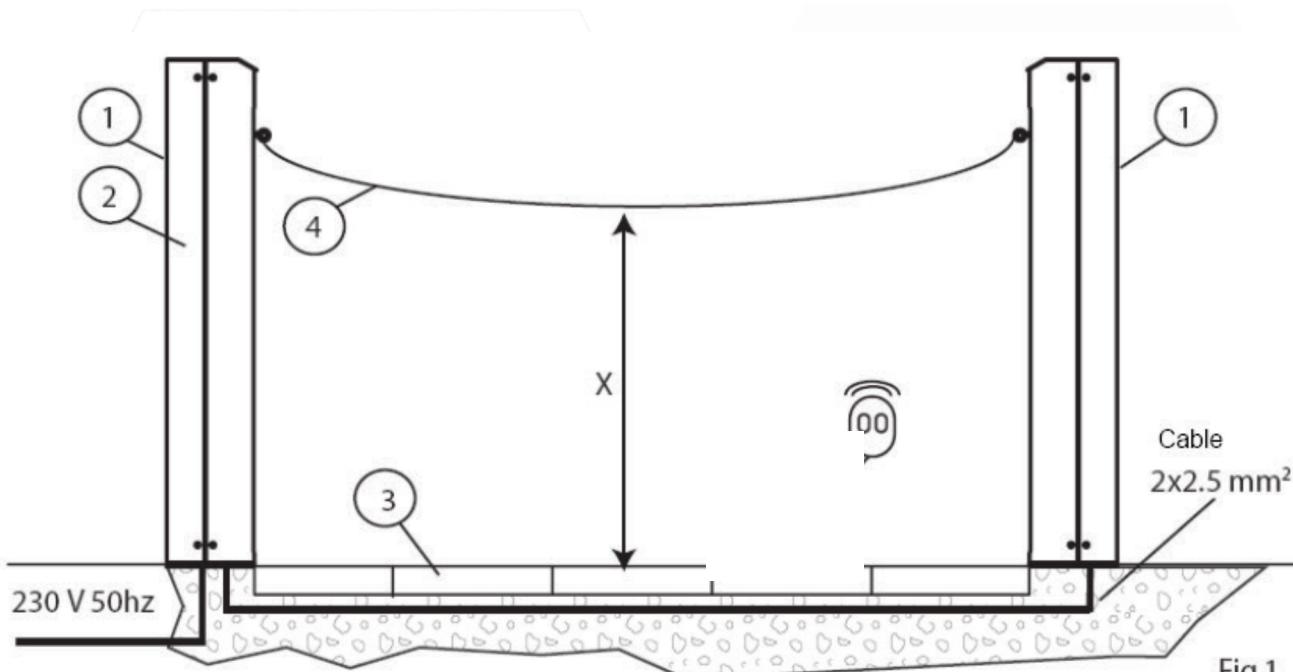
**The User Guide will help you use your product quickly and safely.**

- Read the user manual before installing and using your product.
- Always follow the safety instructions.
- Keep this user manual at hand for future reference.

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## 1. LAYOUT



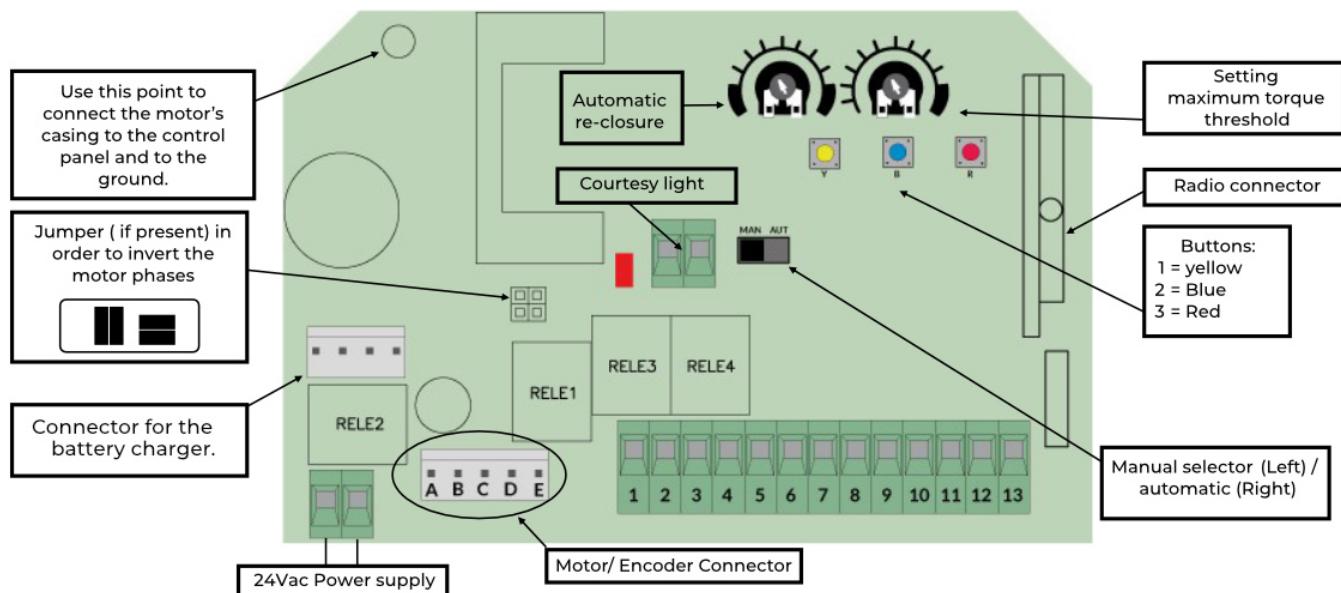
1. Parking post
2. Control unit
3. Profile for the chain
4. Chain

Length of the chain (m)	4	6	8	10	12	14	16	18	20
Relative height in the middle X (cm)	75	70	65	60	55	50	45	40	35

**Attention: The value in the table has been determinated using a chain of 400 grams/meter**

## 2. CONFIGURATION

Action is a control unit dedicated to the movement of the chain barrier with **24Vdc motor**. The coexistence of various types of safeties such as the control of the absorbed power by the motor and the velocity of the motor allows a rapid intervention of the anti – squeezing security (sense). Through the encoder present in the motor it is possible to control the exact position of the chain and to use it without mechanical limit switches. The control unit has inputs for mechanical limit switches, for the step by step button, for the pedestrian opening, for the safety photocells and the output for flashing light 24 Vac. The unit also allows the regulation by trimmer both the automatic re-closure and the motor force. Action can control motors at 24 – 30 Vcc with a maximum consumption of 7A.



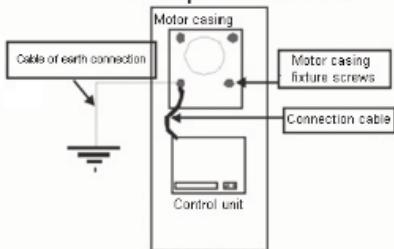
## 5. PROBLEMS AND THEIR SOLUTIONS

Type of problem	Probable cause	Solution
On activating the opening command the automation does not move.	Lack of electrical power supply	Check the presence of the electrical voltage and all the connections to the electrical network.
	Burned fuse	Replace the fuse with a similar one.
On activating the opening command the chain moves for a brief time and then stops.	Incorrect encoder connection	Check the connections of the encoder's wires.
On activating the opening command, the automation moves to closure.	Jumper direction motor inverted	Invert the Jumpers.
You cannot manage to enter into the remote control learning phase	The chain is not completely closed (UP)	Close the chain (in the manual). If the chain was closed set selector S1 to manual, wait 1 second and reset it to automatic. Try again entering into setting mode.
You cannot manage to memorize the remote controls	The type of set decoding in the control panel does not correspond to the type of remote control in use.	Check which decoding has been set and possibly select that which corresponds to the remote control in use.
You cannot manage to enter into the opening/ closure programming mode. (run-time)	The chain is not completely closed (UP)	Close the chain (in the manual). If the chain was closed set selector S1 to manual, wait 1 second and reset it to automatic. Try again entering into setting mode.
The control panel is powered but the gate does not move.	A normally closed input is not active	Check the photocell, stop and limit switch input. If not used they must be bridged to the common.

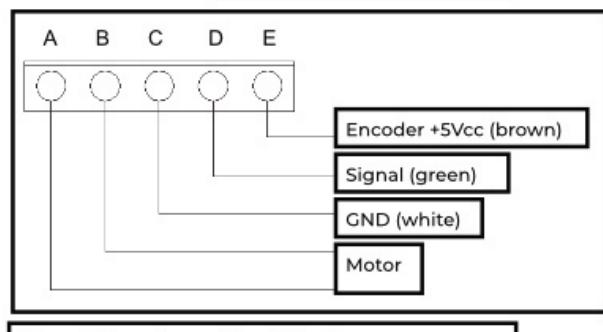
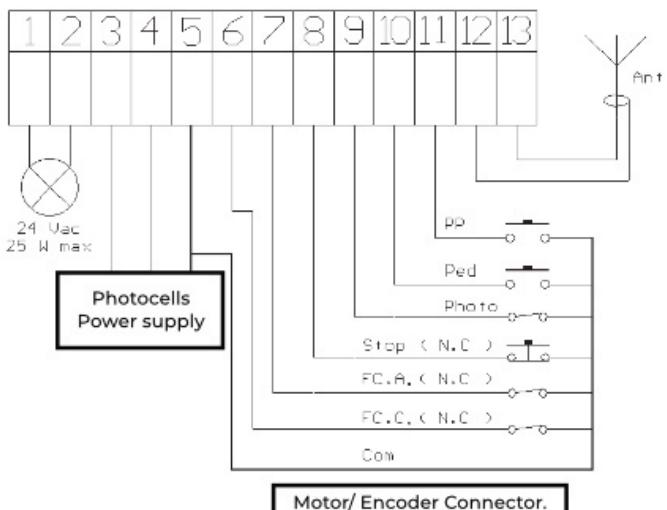
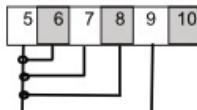
### 3. ELECTRICAL CONNECTIONS

Terminal	Function	Setting
<b>1 - 2</b>	Flashing signal output	OUT: 24 Vac 25 W MAX
<b>3</b>	Positive power supply TX & RX photocell	OUT: +24Vcc
<b>4</b>	Negative power supply TX photocell	OUT: GND TX
<b>5</b>	Negative power supply RX photocell and common button and safety	OUT: GND RX Common
<b>6</b>	Stop closure button input	Normally closed (NC)
<b>7</b>	Stop open button input	Normally closed (NC)
<b>8</b>	STOP button input	Normally closed (NC)
<b>9</b>	RX photocell contact input	Normally closed (NC)
<b>10</b>	Pedestrian button input	Normally open (NO)
<b>11</b>	Relay button input	Normally open (NO)
<b>12</b>	Antenna screen input	GND
<b>13</b>	Antenna input	Antenna

Example of connection



Any contact which is  
Normally Closed  
(N.C.) Must be  
bridged to the  
common if not used.



Note: Cable colors valid only for Tecno-cat motor.

IMPORTANT: to obtain a correct working of the accessories (photo devices in particular) connected to the control box, it is very important that the entire system (motor+ control box) has a single mass reference system. You must therefore connect a small cable between the motor casing and the control box at the point shown in the figure. If there is a good ground connection it is advisable to connect it to the system.

## 4. ENABLING AND DISABLING THE PRE-FLASHING, PHOTOCELL TEST AND THE MULTI-USER FUNCTION

To modify the status of any of these functions it is necessary to enable the setting mode. In the phase of learning the control unit automatically goes through all possible functions in which it is possible to intervene. The led of the flashing light signals the selected function each time with a variable number of flashings. The passage from a function to another one is executed automatically (it is enough to maintain always pressed the red button). The control unit starts selecting the first function (signaled by 1 flashing), successively, keeping pressed the red button you pass at the second function (signaled by 2 flashings) and so on. To enable the setting / learning mode proceed as follows:

1. Raise the chain to its upper position (completely closed).
2. Press and keep pressed the red button
3. After 4 - 5 seconds the led of the flashing - light executes a series of 8 flashings (notifying the next entry to the learning mode). Once the series of flashings end the control unit is in the learning mode. **Do not release the red button yet.**
4. Once individualized (through the number of flashings of the flashing-light led) the function that you want to modify, release the red button. This way the function is selected. Once selected the function, the control unit puts in evidence the setting by flashing with a slow frequency (1 flashing /second) or with a rapid frequency (2 flashings / second) as pointed out on the next table:

No. of flashes	Selected function	Flash	Yellow button	Blue button
1	Pre-flashing	Slow= disabled	activation	deactivation
2	Photocell Test	Fast= disabled	activation	deactivation
3	Multi-user setting	Slow= disabled	activation	deactivation
4	Reserved			
5	Reserved			
6	Reserved			

5. Press now the button ( see table) correspondent to the new status you wish set for the selected function. The frequency of flashing will vary according to the chosen mode.

At this point it is possible to modify further functions or, if you have finished, go out from the setting phase. In case you want to modify other functions, press and keep pressed the red button. After few seconds, the control unit will start again to select in sequence the several functions. Instead if you want to exit from the learning mode, it is sufficient to bring the lever of the selector Sw1 in manual position, wait 1-2 sec and successively report it in automatic position. In this way, the control unit gets out of the learning mode and prepares itself for the normal functioning.

**6.1 Pre-flashing:** The chain movement is always signalized by a pre-blinking, advising the user that the chain is next to move.

**6.2 Multi-user function:** During the opening phase of the chain, every other command is ignored. Once opened the chain (completely down, it is possible to close it using the step-by-step command or using the automatic re-closure. During the closing phase, a step-by-step command blocks and inverts the movement.

**6.3 Photocell test:** Every time the motor is switched on, the control unit automatically controls if the photocells are functioning properly.

This operation increases the security system. If a photocell is damaged (for instance output relay stuck) or in case of undesired photocell input short

circuit. This test is executed immediately after that the control unit has received an order of "moving", but before power is applied to the motor.

## 6. DESCRIPTION AND DIMENSION OF THE COLUMN

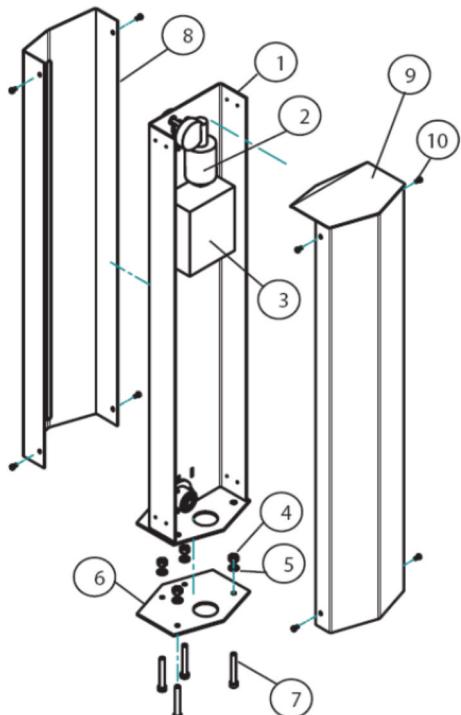


Fig.4

1. Column
2. Gear motor with encoder
3. Control unit
4. Auto blocking nut M10
5. Washer 20x10
6. Backing plate
7. Screw M10x70
8. Anterior cover
9. Posterior cover
10. Closing screw M5x10

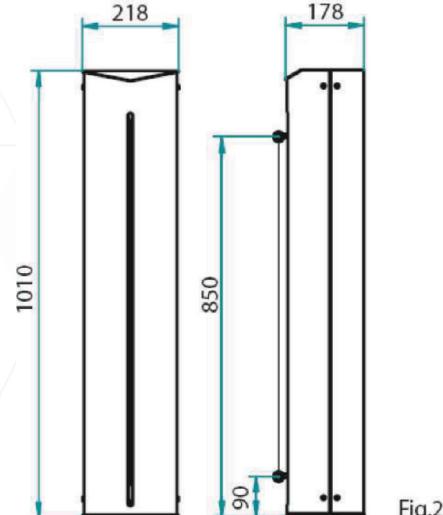


Fig.2

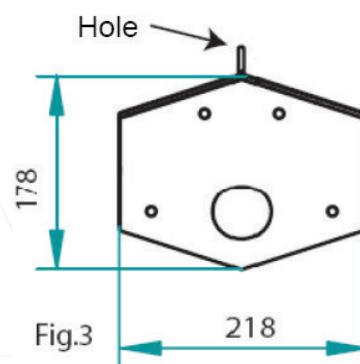
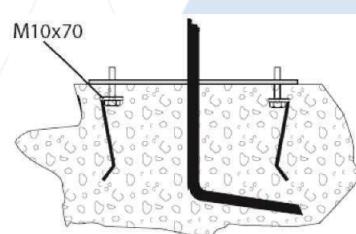


Fig.3



## 7. INSTALLATION

All measures are expressed in millimeters unless otherwise indicated.

### 7.1. Preliminary Control

1. Control the stability and solidity of the zone where the columns are going to be fixed.
2. Use an omni-polar interrupter with contact distance of at least 3mm.
3. The connection to the power supply must be separated than the connections to the security and commanding devices

### 7.2. Installation of the Column (Fig.1, Fig.2, Fig.4)

1. Screw in for 1,5 - 2,0 cm the 4 screws M10x70 in dotation to the base.
2. Place the base on the previously prepared base of cement (Fig.3)
3. The upper part of the base should be clean and perfectly horizontal.
4. Pass the plastic tubes of the cables through the central opening on the base and check again the stability of the base.
5. Unscrew the 8 screws [10] take off the frontal [8] and the rear cover [9] of the column (Fig. 4 )
6. Place now the column structure on the base.
7. Fix now the column to the base with the 4 washers [5] and 4 nuts [4].
8. Fix the frontal covers [8] of both columns with 4 screws [10].
9. Now you can fix the chain to the apposite holes on both columns respecting the level X in the middle of the chain barrier indicated at the table on page 1 (Fig. 5 )

## 8. MAINTENANCE PLAN (EVERY 6 MONTHS)

1. Cut the power supply off or disconnect the batteries if present. Clean and grease the guide internally.
2. See if there are wired parts and replace these if necessary.
3. Grease the internal transmitting chain.
4. Check the fixation nuts.
5. Control the electrical connections
6. Supply the power again. Check out the correct functioning of the obstacle recognition (encoder system).
7. Check out the correct functioning of all and of the security commands.

## 9. CONNECTION OF THE BRAKING JOINT



STEP 1



STEP 2



STEP 3

## 10. TECHNICAL DATA

Power supply	230 Vac 50 Hz
Current Draw	1.0 A
Motor Power	60 W
Motor Power	645 Nm
Service	50 %
Protection Degree	IP 34
Lubrication	Permanent
Weight	25 Kg
Max chain weight	8.5 Kg