

E MAT ST 324	E MAT MT 5012
E MAT ST 524	E MAT MKT 1517
E MAT ST 611	E MAT MKT 3017
E MAT ST 1011	E MAT MKT 5012
E MAT MT 426	E MAT LT 5517
E MAT MT 1026	E MAT LT 6517
E MAT MT 817	E MAT LT 7517
E MAT MT 1517	E MAT LT 8012
E MAT MT 3017	E MAT LT 10012
E MAT MT 4012	E MAT LT 12012



Tubular motor

EN - Instructions and warnings for installation and use

IT - Istruzioni ed avvertenze per l'installazione e l'uso

FR - Instructions et avertissements pour l'installation et l'utilisation

ES - Instrucciones y advertencias para la instalación y el uso

DE - Installierungs- und Gebrauchsanleitungen und Hinweise

PL - Instrukcje i ostrzeżenia do instalacji i użytkowania

NL - Aanwijzingen en aanbevelingen voor installatie en gebruik

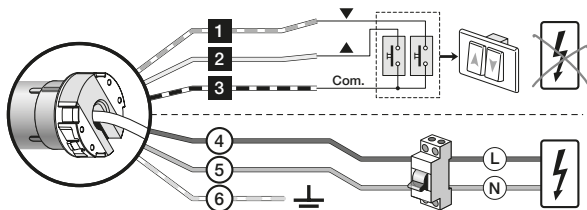
Quick start guide

Era Mat T tubular motor for awnings

Note for reading this Guide • In this Quick Start Guide, the numbering of the figures is separate and does not correspond to the numbering cited in the complete manual. • This guide does not substitute the complete manual.

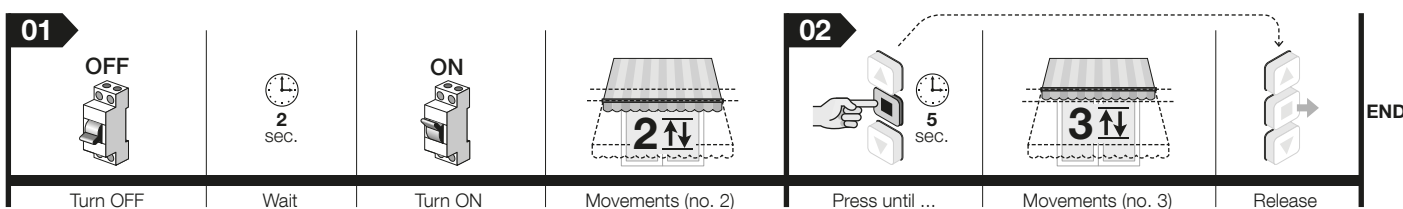
Nice

1 - Electrical connections - see Chapter 4



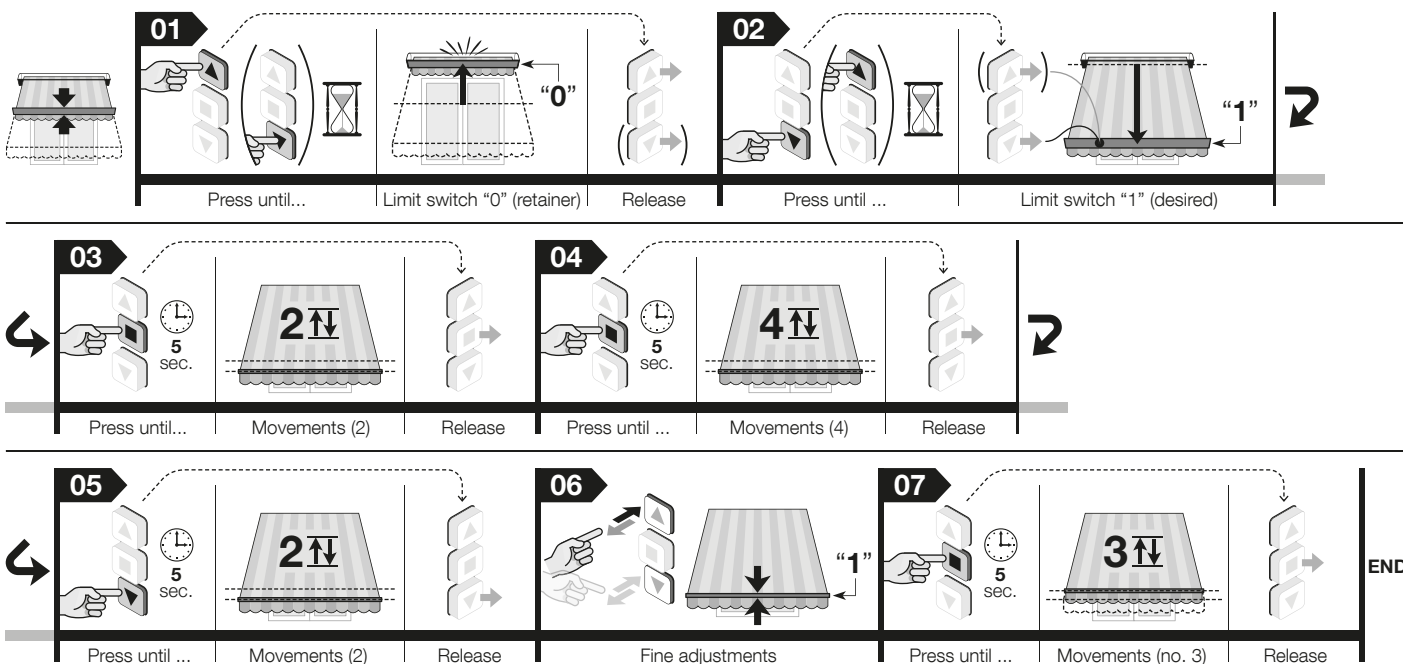
Cable	Colour	Connection
1	White-orange	Clockwise rotation pushbutton
2	White	Counter-clockwise rotation pushbutton / TTBus
3	White-black	Common (for bus wires)
4	Brown	Supply phase
5	Blue	Neutral
6	Yellow-green	Earth (cable not present on series "E Mat ST" motors)

2 - Memorising the FIRST transmitter - see paragraph 5.5

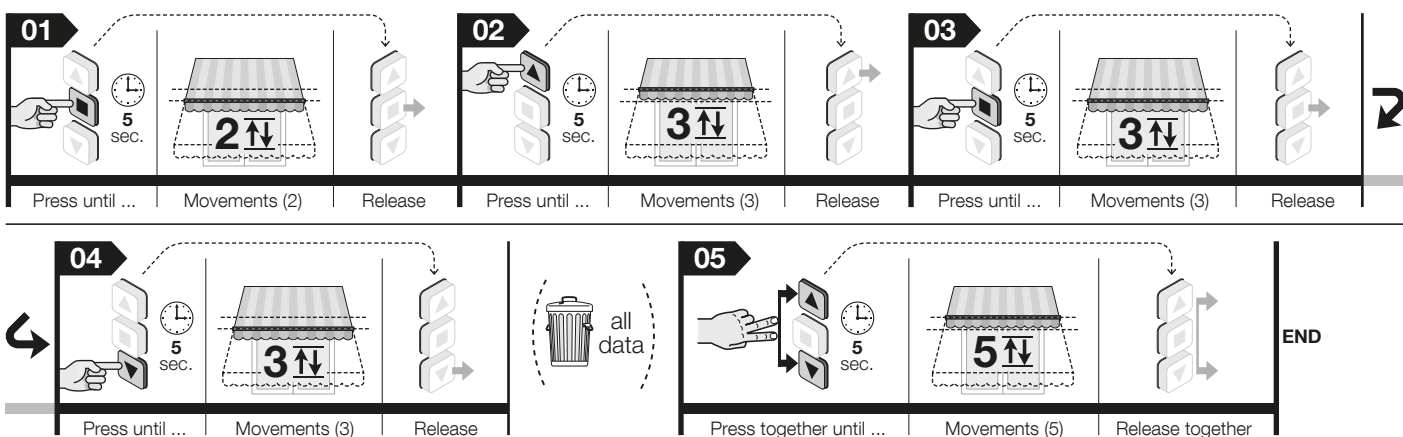


3 - Adjust limit switches "0" and "1" in SEMIAUTOMATIC mode - ref. paragraph 5.7

Warning - The first limit switch to be memorised must be the one with retainer of the awning against the structure (e.g. the box in limit switch "0").



4 - Total deletion of memory - ref. paragraph 5.16



Complete Manual

Note for reading this Manual – Some of the figures referred to in the text appear at the end of the manual.

1 WARNINGS AND GENERAL PRECAUTIONS FOR SAFETY

- **Attention! – Important safety instructions: keep these instructions.**
- **Attention! – It is important to follow these instructions to ensure safety. Therefore, read this manual carefully before beginning work.**

1.1 - Installation warnings

- All the product installation, collection, programming and maintenance operations must be carried out exclusively by a skilled and qualified technician, in observance of local laws, standards, regulations and the instructions in this manual.
- Before starting installation, read paragraph 3.1 to make sure the product is suitable for automating your awning. If not suitable, do NOT proceed with installation.
- The product installation and maintenance operations must be performed with the automation mechanism disconnected from the power mains. Moreover, before starting to work, put a sign on the disconnection device that says "ATTENTION! MAINTENANCE IN PROGRESS".
- Before starting installation, remove all electrical cables unrelated to the system and deactivate all mechanisms not needed for motorised operation of the awning.
- If the product is installed at a height of less than 2.5 m from the floor or from any other supporting surface, you must protect moving parts with a cover to prevent accidental access. Refer to the awning instruction manual for information on how to provide protection; in any case, make sure access is possible for maintenance work.
- During installation, handle the product with care: avoid crushing, impact, dropping or contact with liquids of any type; do not drill or apply screws to the exterior; never place the product near sources of heat or expose to naked flames (fig. 1). All these actions could damage the product and cause malfunctions or hazardous situations. In these cases, suspend installation immediately and contact the Nice Service Centre.
- Do not apply screws to the winding roller on the section that is crossed by the motor internally. Such screws could damage the motor.
- Do not dismantle the product except to perform the operations described in this manual.
- Do not make any changes to any part of the product except those indicated in this manual. The manufacturer declines all liability for damage caused by makeshift modifications to the product.
- The power supply cable for the motor is made from PVC and is suitable for use in indoor environments. For use in other environments, protect the entire length of the cable by inserting it inside a dedicated sheath for protecting electrical cables.
- The unit's power cable may not be replaced. If the cable is damaged, the device must be scrapped.
- When assembling the system, keep people far away from the awning when it is moving.

1.2 - Use warnings

- This product is not intended to be used by persons (including children) whose physical, sensorial or mental capacities are reduced, or who lack the necessary experience or skill.
- Do not allow children to play with fixed control devices. Keep remote control devices out of reach of children.
- When performing a manoeuvre, keep a check on the automation and keep all people at a safe distance until the movement has been completed.
- Do not operate the mechanism when jobs are being performed in the vicinity, i.e. window cleaning, maintenance jobs, etc. Disconnect the electrical supply before starting such jobs.
- Remember to check the balance springs and wear and tear on cords frequently (if such mechanisms are present). Do not use the product if it needs to be adjusted or repaired; contact specialised technical personnel to solve these problems.

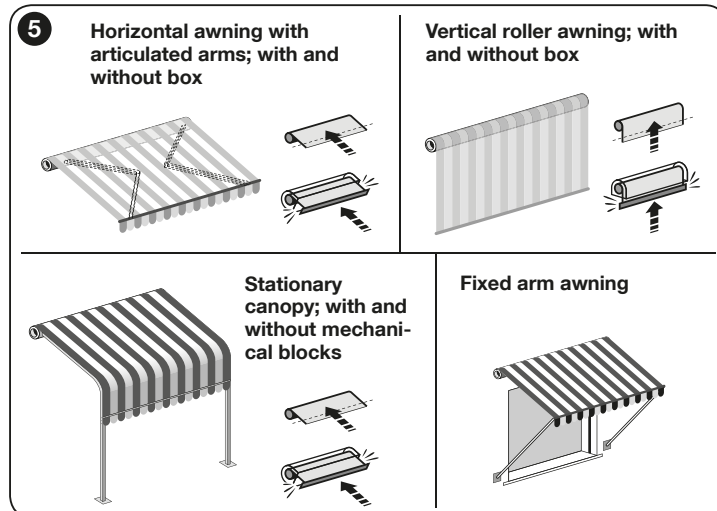
2 PRODUCT DESCRIPTION AND INTENDED USE

Era Mat T is a family of tubular motors intended exclusively for the automation of various types of awnings (see fig. 5). **Any other use is absolutely prohibited! The manufacturer is not liable for damage resulting from any use of the product other than the intended use specified in this manual.**

Functional characteristics of the product:

- it is powered via the electrical mains (consult data on the motor dataplate);
- it must be installed inside the winding roller; the part of the motor that protrudes from the roller (electronic head) is fixed to the ceiling or the wall with suitable support brackets (not supplied in pack);
- it has a built-in radio receiver and control unit with encoder technology that electronically controls the movement and precision of the limit switches;

- it is compatible with all Nice electronic control components (transmitters and climate sensors) that use the NRC radio system;
- it can be controlled by radio or by cable using various optional accessories not included in the package (see fig. 3);
- it can be programmed via radio, with a portable transmitter or with a Nice hand-held programmer (these accessories are not included in the package);
- it can move the awning up or down; stop it at the upper limit switch, the lower limit switch or various intermediate positions;
- it is equipped with a thermal protection system which, in the case of overheating caused by overuse of the automation (beyond the indicated limits), automatically cuts off the electricity supply, restoring it as soon as the temperature goes back to normal;
- it is available in several versions, each with a certain motor torque (power).



3 INSTALLATION OF THE MOTOR AND THE ACCESSORIES

3.1 - Preliminary checks before installation and limitations on use

- Check the condition of the product right after unpacking it.
- This product is available in several versions, each with a specific motor torque. Each version is designed to drive awnings of a certain size and weight. Therefore, before installation make sure the product's motor torque, rotation speed and operation time are suitable for automating your awning (see the "Guide to Selection" section in the Nice Product Catalogue – www.niceforyou.com). In particular, **do not install the product if its motor torque is greater than that needed to move your awning.**
- Check the diameter of the winding roller. This must be chosen according to the motor torque, as follows:
 - for the motors of size "S" ($\varnothing = 35$ mm), the minimum inside diameter of the winding roller must be 40 mm;
 - for the motors of size "M" ($\varnothing = 45$ mm), with a torque of up to 35 Nm (included), the minimum inside diameter of the winding roller must be 52 mm;
 - for the motors of size "M" ($\varnothing = 45$ mm), with a torque higher than 35 Nm, the minimum inside diameter of the winding roller must be 60 mm;
 - for the motors of size "L" ($\varnothing = 58$ mm), the minimum inside diameter of the winding roller must be 70 mm.
- Before automating an awning, check that there is enough free space in front of it for it to be completely opened.
- If the motor is to be installed outdoors, adequate protection against atmospheric agents must be guaranteed.

Additional limitations on use are contained in chapters 1 and 2 and in the "Technical characteristics" section.

3.2 - Assembly and installation of the tubular motor

Warning! – Before starting, carefully read the warnings under sections 1.1 and 3.1. Incorrect installation could cause severe physical injury.

To assemble and install the motor, refer to fig. 4. Moreover, consult the Nice product catalogue or go to www.niceforyou.com to choose the crown of the limit switch (fig. 4-a), the drag wheel (fig. 4-b) and the motor fastening bracket (fig. 4-f).

3.3 - Installation of accessories

After installing the motor, install the accessories, if required. In order to identify those that are compatible and choose the models desired, see the Nice product catalogue, also viewable at www.niceforyou.com. For further details on the operation of the accessories and how to program their options, refer to Chapter 6. Fig. 3 shows the type of accessories that are compatible and their connection to the motor (all of these are options and not included in the package).

4 ELECTRICAL CONNECTIONS AND FIRST POWER UP

The electrical connections must be made only after installing the motor and compatible accessories required.
The electrical cord of the motor is made up of the following internal cables (fig. 3):

Cable	Colour	Connection	
1	White-orange	Clockwise rotation pushbutton	⚡
2	White	Counter-clockwise rotation pushbutton / TTBus	
3	White-black	Common (for bus wires)	
4	Brown	Supply phase	⚡ ac
5	Blue	Neutral	
6	Yellow-green	Earth (cable not present on series "E Mat ST" motors)	

4.1 - Connection of motor to electricity mains

Utilise cords 4, 5, 6 (fig. 3) to connect the motor to the main and pay attention to the **warnings**:

- improper connection can cause breakdowns and hazardous situations;
- scrupulously respect the connections indicated in this manual;
- in the power supply network of the motor you must install a disconnection device having an opening distance of the contacts that allows complete disconnection in the overvoltage category III conditions, in conformity with the installation rules (disconnection device not supplied with the product).

4.2 - Connection of accessories to motor

Accessories can be connected by cable: use cables 1, 2, 3 (fig. 3) to connect the accessories to the motor; refer to fig. 3 of Chapter 6 - "Optional Accessories" and pay attention to the following **warnings**:

- **CAUTION!** – The maximum length of the cables used to connect a wall-mounted panel or a relay, is 100 m.
- Cables 1, 2, 3 of the bus lines MUST NOT be connected to be electrical mains.
- To the White + White-black lead you can connect only one accessory at a time from among the compatible ones.
- To the White-orange + White-black lead you can connect only one accessory at a time from among the compatible ones.
- The Open and Flows inputs are constrained to reach other, in other words they must be used with the same pushbutton strip (fig. 3). As an alternative, if only the White lead is available, you can use the step-by-step input.

Accessories can be connected by a radio (portable transmitters and certain climatic sensor models): memorise these accessories in the motor during the programming phases; refer to the procedures given in this manual (procedure 5.11) and those given in the manuals supplied with the devices.

5 PROGRAMMING AND ADJUSTMENTS

5.1 - Transmitter to be used for programming procedures

- The programming procedures can be performed exclusively with a Nice transmitter having at least the following keys ▲, ■, ▼.
- The programming procedures must be performed exclusively with a transmitter memorised in "Mode I" (paragraph 5.5 or 5.10.1).
- If the transmitter used for programming controls multiple automation units, you must select the "unit" corresponding to the automation you are programming before sending a command during a procedure.

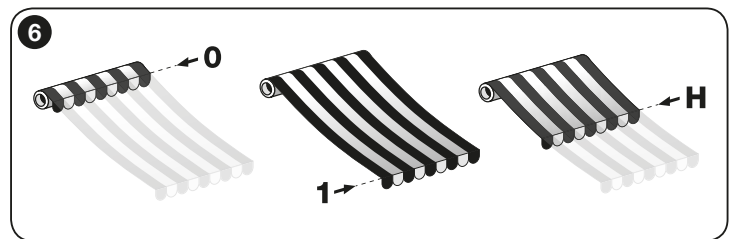
5.2 - Positions in which the awning stops automatically

The electronic system that controls the awning movement at all times can automatically stop the movement when the awning reaches a certain position programmed by the installer. The programmable positions are (fig. 6):

- position "0" = upper limit switch: totally wound awning;
- position "1" = lower limit switch: totally unwound awning;
- position "H" = intermediate position: partially open awning.

When the limit switches are not programmed yet, the awning can be moved only in the "hold-to-run" mode, i.e. keeping the control key pressed for the desired duration of the manoeuvre; the movement stops as soon as the user releases the key. However, after programming the limit switches, briefly pressing the appropriate key will start the awning and it will stop moving automatically as soon as the awning reaches the required position.

To adjust the distances "0" and "1" various procedures are possible; to choose the appropriate one, take into account the supporting structure of your awning (see the summary in the table).



WARNING! – If you want to again adjust again the height of the limit switches adjusted previously, consider the following:

- If you would like to adjust them with an **alternative procedure** different from the one used previously, you must **FIRST** delete the heights by following procedure 5.16.
- If you wish to adjust them with the **same procedure** used previously, you need not delete them.

The programming of the limit switches simultaneously combines the two directions of rotation of the motor to the respective shutter raising key (▲) and shutter lowering key (▼) of the control device (initially, when the limit switches are not programmed yet, the combination is random and it can happen that when pressing the ▲ key, the shutter moves down instead of up, or vice versa).

5.3 - General warnings

- The limit switch must be adjusted after installing the motor in the awning and connecting it to the power supply.
- In cases of installations with several motors and/or receivers, before starting to program you must disconnect the electrical supply to the motors and receivers you do not wish to program.
- Scrupulously respect the time limits indicated in the procedures: after releasing a key, you have 60 seconds to press the next key indicated in the procedure; otherwise, when the time is up, the motor will perform six movements to communicate cancellation of the procedure in progress.
- During programming, the motor performs a certain number of brief movements, as a "response" to the command sent to the installer. It is important to count the number of these movements without considering the direction in which they are performed.
- Every time the motor is powered, 2 movements are performed if at least one transmitter and the limit switch heights are not in the memory.

5.4 - Overview of the transmitters

5.4.1 - Compatible transmitters

Consult the Nice product catalogue or go to www.niceforyou.com to find the Nice devices compatible with the radio receiver built into the motor.

5.4.2 - Transmitter memorisation hierarchy

In general a transmitter can be memorised as a **FIRST** transmitter or a **SECOND** transmitter (or third, fourth, etc.).

A - First transmitter

A transmitter can be memorised as a first transmitter only if in the motor no other transmitter is memorised. For this memorisation, follow procedure 5.5 (this memorises the transmitter in "Mode I").

B - Second (or third, fourth, etc.) transmitting device

A portable transmitter (or a radio climate sensor) can be memorised as a second (or third, fourth, etc.) transmitting device only if the First Transmitter is already memorised in the motor. For this memorisation, follow one of the procedures given in section 5.10.

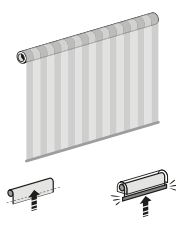
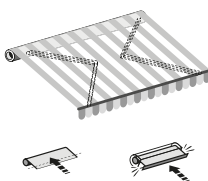
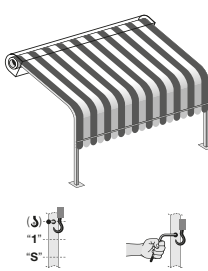
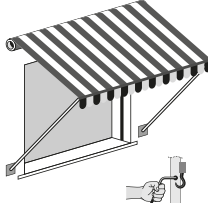
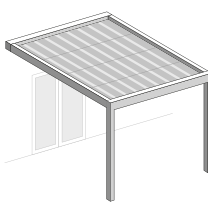
5.4.3 - Two procedures to memorise the keys of a transmitter

To memorise the keys of a transmitter, two different procedures can be used: "Mode I" and "Mode II".

- **"MODE I"** – This mode automatically transfers, the various commands available in the motor, all together, into the various keys available on the transmitter, without allowing the installer to change the combinations of commands and keys. Upon completion of the procedure, each key will be combined with a command according to the following diagram.
 - key ▲ (or key 1): will be combined with **Raise**
 - key ■ (or key 2): will be combined with the command **Stop**
 - key ▼ (or key 3): will be combined with the command **Lower** (if there is a fourth key on the transmitter)
 - key 4: will be combined with the command **Stop**

Note – If the keys of your transmitter have no symbols or numbers, see fig. 2 to identify them.

- **"MODE II"** – This mode allows you to manually combine one of the commands available in the motor with one of the transmitter keys, giving the installer the option of choosing the command and key combinations to use. At the end of the procedure, to memorise another key with another command desired, it will be necessary to repeat the procedure once again.

Application types and operating requirements		Recommended programming	
Vertical roller awning 	Limit switch programming:	• with automatic stop in the upper limit switch position "0" (with box)	Programming in semiautomatic mode (paragraph 5.7)
		• without containment mechanical constraints in the upper limit switch "0"	Programming in manual mode (paragraph 5.6)
	Functions available...	...in the presence of automatic hooks in the lower limit switch "1"	Programming the "FTC" function (paragraph 5.15)
		...in the presence of manual hooks or bolts in the lower limit switch "1"	Programming the "FTA" function (paragraph 5.14)
Arm awning 	Limit switch programming:	• with automatic stop in the upper limit switch position "0" (with box)	Programming in semiautomatic mode (paragraph 5.7)
		• without containment mechanical constraints (square bar or similar)	Programming in manual mode (paragraph 5.6)
	Functions available...	...to stretch the canvas: "FRT" function	Programming the "FRT" function (paragraph 5.13)
		...if it is necessary to reduce the impact force when closing	Adjustment of the motor traction force ("RDC" function – paragraph 5.12)
Stationary canopy 	Limit switch programming:	• with automatic stop in the upper limit switch position "0" (with box)	Programming in semiautomatic mode (paragraph 5.7)
		• without containment mechanical constraints for the limit switches	Programming in manual mode (paragraph 5.6)
	Functions available...	...in the presence of automatic hooks in the lower limit switch "1"	Programming the "FTC" function (paragraph 5.15)
		...in the presence of manual hooks or bolts in the lower limit switch "1"	Programming the "FTA" function (paragraph 5.14)
Awning "alla romana" 	Limit switch programming:	• with automatic stop in the upper limit switch position "0"	Programming in semiautomatic mode (paragraph 5.7)
		• without containment mechanical constraints for the limit switches	Programming in manual mode (paragraph 5.6)
	Functions available...	...in the presence of manual hooks or bolts in the lower limit switch "1"	Programming the "FTA" function (paragraph 5.14)
		...if it is necessary to reduce the impact force when closing	Adjustment of the motor traction force ("RDC" function – paragraph 5.12)
Pergola awning 	Limit switch programming:	• with automatic stop in the two limit switch positions: upper "0" and lower "1"	Programming in automatic mode (paragraph 5.8)
		• with automatic stop in the lower limit switch position "1"	Programming in semiautomatic mode (paragraph 5.7)
		• without containment mechanical constraints for the limit switches	Programming in manual mode (paragraph 5.6)
	Functions available...	...if it is necessary reduce the impact force when closing	Adjustment of the motor traction force ("RDC" function – paragraph 5.12)

Warning! – Each automation has its own list of commands that can be memorised in Mode II; in the case of the present motor the list of commands available is given in procedure 5.10.2.


5.4.4 - Number of transmitters that can be memorised

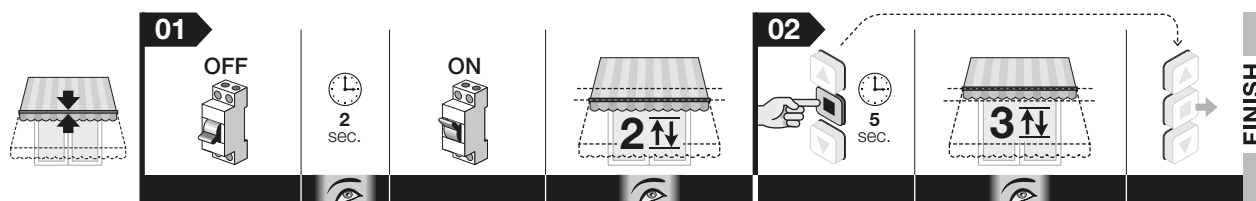
You can memorise **30 transmitters** (including any radio climate sensors) if these are all memorised in "Mode I", or you can memorise **30 single commands (keys)** if they are all memorised in "Mode II". The two modes can coexist up to a maximum limit of 30 memorised units.

5.5 - Memorising the **FIRST** transmitter

Warning – Every time the motor is powered, 2 movements are performed if at least one transmitter and the limit switch heights are not in the memory.

Before starting the procedure, bring the awning to the midpoint of its stroke.

01. Disconnect the power supply to the motor; wait two seconds and reconnect the power supply: the motor performs 2 movements and waits with no time limit.
02. Keep the key  pressed and wait for the motor to perform three movements. Upon completion, release the key.






Note – After memorisation, the raising and lowering direction of the awning is not yet associated with the ▲ and ▼ respective keys of the transmitter. This combination will occur automatically when adjusting limit switches “0” and “1”; moreover, the rolling shutter will move in the “operator present” mode until the limit switches are adjusted.

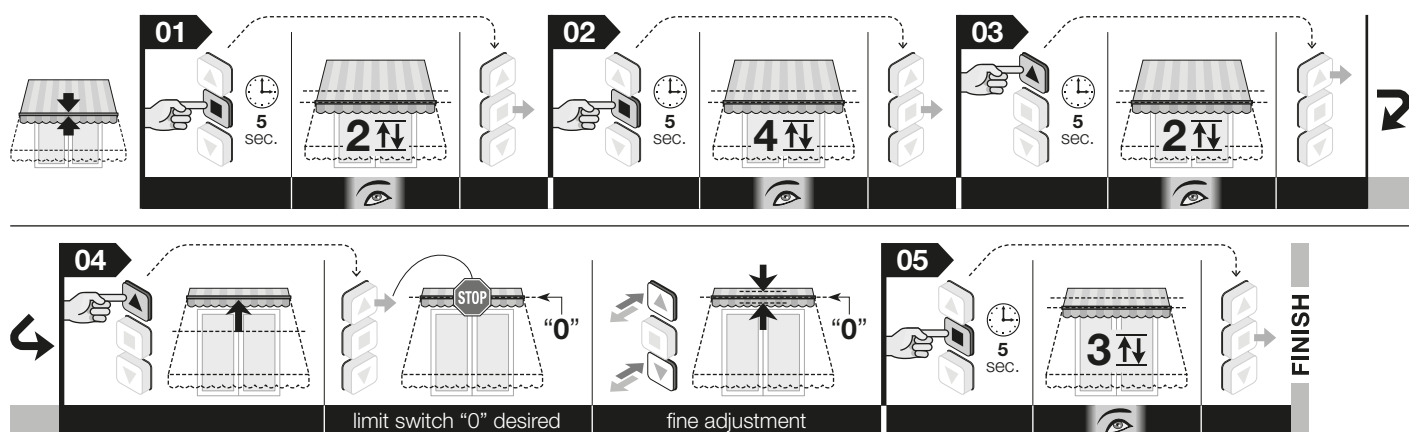
5.6 - **Manual adjustment of upper limit switch height (“0”) and lower height (“1”)**


Warnings • This procedure overwrites previously adjusted heights with the new heights using this same procedure. • Every time the motor is powered, 2 movements are performed if at least one transmitter and the limit switch heights are not in the memory.

5.6.1 - To adjust the **UPPER** limit switch (“0”)

Before starting the procedure, bring the awning to the midpoint of its stroke.




01. Keep the  key pressed and wait for the motor to perform 2 movements. Upon completion, release the key.
02. Keep the  key pressed again and wait for the motor to perform 4 movements. Upon completion, release the key.
03. Keep the ▲ key pressed and wait for the motor to perform two movements. Upon completion, release the key.
04. **Adjustment of the position:** keep the ▲ (or ▼) key pressed until the awning reaches the desired “0” height. **Note** – to adjust the height with precision, press the ▲ and ▼ keys several times consecutively (at each pulse the awning moves a few millimetres).
05. Keep the  key pressed and wait for the motor to perform 3 movements. Upon completion, release the key.

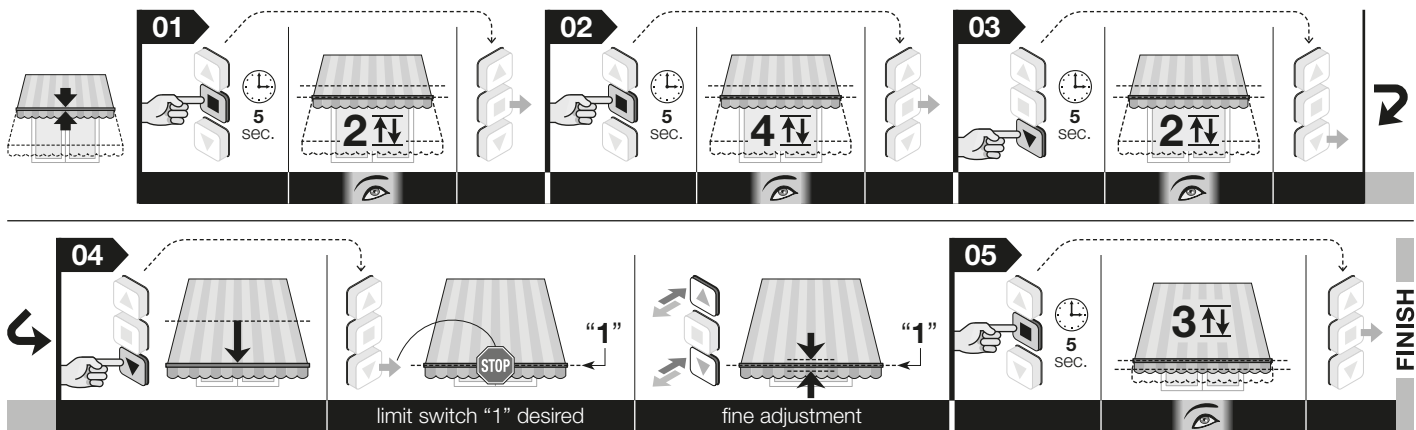


Note – When performing the procedure, at any time you can cancel it by keeping the  and ▼ keys pressed simultaneously for 4 seconds. Otherwise, do not press any key and wait 60 seconds for the motor to perform 6 movements.

5.6.2 - To adjust the **LOWER** limit switch (“1”)

Before starting the procedure, bring the awning to the midpoint of its stroke.

01. Keep the  key pressed and wait for the motor to perform 2 movements. Upon completion, release the key.
02. Keep the  key pressed again and wait for the motor to perform 4 movements. Upon completion, release the key.
03. Keep the ▼ key pressed and wait for the motor to perform 2 movements. Upon completion, release the key.
04. **Adjustment of the position:** Keep the ▼ (or ▲) key pressed until the awning reaches the desired “1” height. **Note** – to adjust the height with precision, press the ▲ and ▼ keys several times consecutively (at each pulse the awning moves a few millimetres).
05. Keep the  key pressed and wait for the motor to perform 3 movements. Upon completion, release the key.



Notes – When performing the procedure, at any time you can cancel it by keeping the ■ and ▼ keys pressed simultaneously for 4 seconds. Otherwise, do not press any key and wait 60 seconds for the motor to perform 6 movements. • After the adjustments, the ▲ key will command the Raising motion and the key ▼ key will command the Lowering motion. The awning will move within the limits constituted by the two limit switch heights.

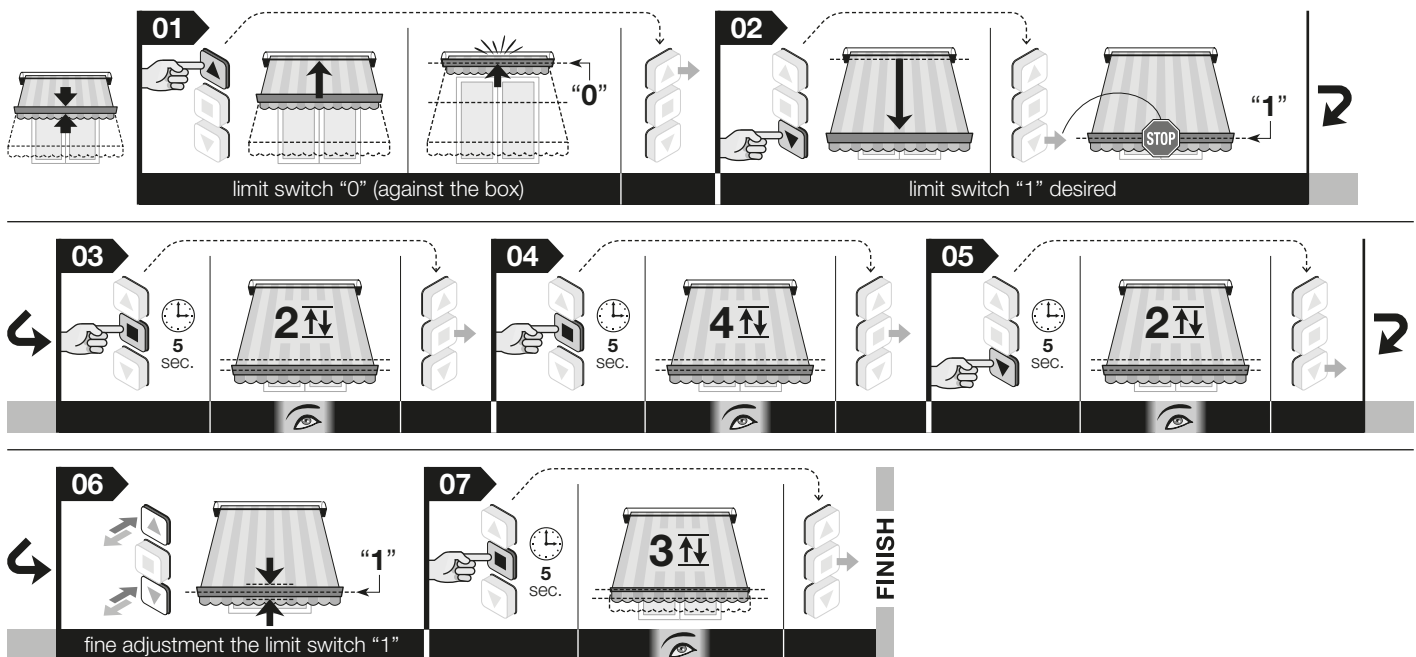
5.7 - Semiautomatic programming of the limit switches

WARNING! – This programming applies to awnings which have the box, thus with retainer in the Upper limit switch “0”. The same procedure also applies when the retainer is in the Lower limit switch “1”.

Warnings • The first limit switch to be adjusted must be the one with the retainer against the structure: the procedure below is an example of programming for an awning with a box. • This procedure overwrites previously adjusted heights with the new heights using this same procedure. • Memorising the limit switches with this procedure, the two heights are controlled and updated constantly by the “limit switch self-update” function (see paragraph 7.2). • Every time the motor is powered, 2 movements are performed if at least one transmitter and the limit switch heights are not in the memory.

Before starting the procedure, bring the awning to the midpoint of its stroke.

01. Run the UP command by keeping the ▲ (or ▼) key pressed and wait for the awning to stop automatically as result of the impact against the structure (= upper limit switch “0”). Upon completion, release the key.
02. Run the Down command by keeping the ▲ (or ▼) key pressed and release the key when the awning is next to your chosen lower limit switch “1”.
03. Keep the ■ key pressed and wait for the motor to perform 2 movements. Upon completion, release the key.
04. Keep the ■ key pressed again and wait for the motor to perform 4 movements. Upon completion, release the key.
05. Keep the ▼ key pressed and wait for the motor to perform 2 movements. Upon completion, release the key.
06. **Fine adjustment of position:** Press the ▼ and ▲ keys until the awning reaches the “1” height you want (at each pulse the awning moves a few millimetres).
07. Keep the ■ key pressed and wait for the motor to perform 3 movements. Upon completion, release the key.



Notes • When performing the procedure, at any time you can cancel it by keeping the ■ and ▼ keys pressed simultaneously for 4 seconds. Otherwise, do not press any key and wait 60 seconds for the motor to perform 6 movements. • After this programming, the ▲ key will command the Raise manoeuvre and the ▼ key will command the Lower manoeuvre. During the Raising manoeuvre, the awning will be stopped by the impact against the mechanical blocks of the structure (= upper limit switch “0”), while during the Lowering manoeuvre the awning will stop at the lower limit switch (“1”) established by the installer.

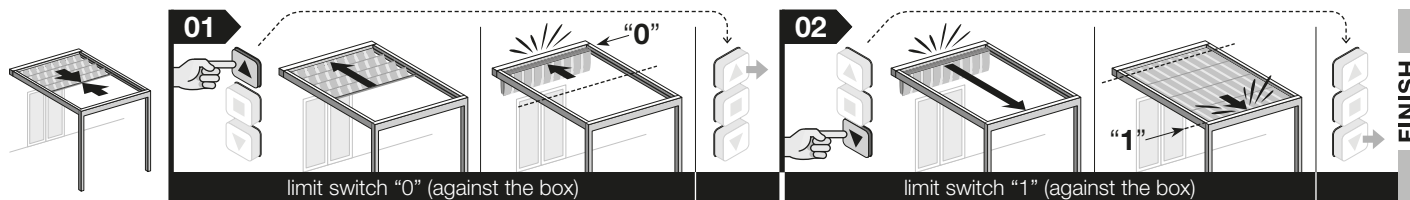
5.8 - Automatic programming of both limit switches

WARNING! – This programming is intended for awnings with retainer lock on both the limit switches (“0” and “1”).

Warnings • This procedure overwrites previously adjusted heights with the new heights using this same procedure. • Memorising the limit switches with this procedure, the two heights are controlled and updated constantly by the “limit switch self-update” function (see paragraph 7.2). • Every time the motor is powered, 2 movements are performed if at least one transmitter and the limit switch heights are not in the memory.

Before starting the procedure, bring the awning to the midpoint of its stroke.

01. Run the UP command by keeping the ▲ (or ▼) key pressed and wait for the awning to stop automatically as result of the impact against the structure (= upper limit switch “0”). Upon completion, release the key.
02. Run the Down command by keeping the ▼ (or ▲) key pressed and wait for the awning to stop automatically as result of the impact against the structure (= lower limit switch “1”). Upon completion, release the key.



Notes • When performing the procedure, at any time you can cancel it by keeping the ■ and ▼ keys pressed simultaneously for 4 seconds. Otherwise, do not press any key and wait 60 seconds for the motor to perform 6 movements. • After this programming, the ▲ key will command the Raise manoeuvre and the ▼ key will command the Lower manoeuvre. During the Raising manoeuvre, the awning will be stopped by the impact against the mechanical blocks of the structure (= upper limit switch “0”), while during the Lowering manoeuvre the awning will stop at the lower limit switch (“1”) established by the installer.

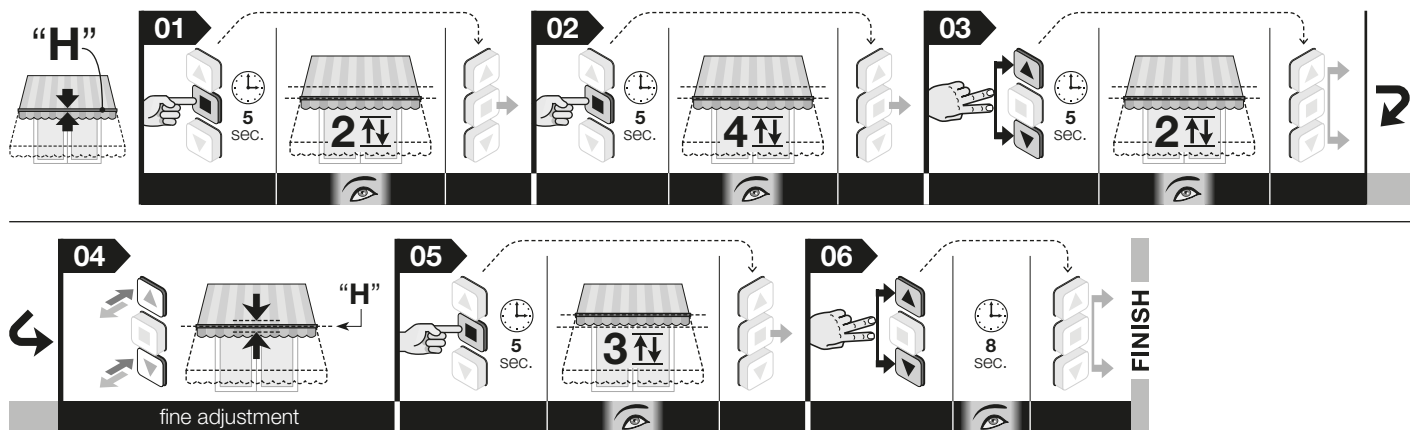
5.9 - Adjusting height (“H”) for partial opening/closing

The motor can manage up to 30 partial openings/closings, each called “H height”. These heights can only be adjusted after adjusting limit switches “0” and “1”. The following procedure makes it possible to adjust one “H” height at a time.

Warning – If you want to change the position a given “H” height that is already memorized, repeat the present procedure by pressing at point 06 the key associated with that height.

Before beginning the procedure, bring the awning to the “H” height you want to memorize.

01. Keep the ■ key pressed and wait for the motor to perform 2 movements. Upon completion, release the key.
02. Keep the ■ key pressed again and wait for the motor to perform 4 movements. Upon completion, release the key.
03. Keep pressed the ▲ and ▼ keys simultaneously and wait for the motor to perform two movements. Upon completion, release the keys.
04. **Fine adjustment of position:** Perform key pulsing on the ▲ key and ▼ key until the awning is brought to the partial height you want (at each pulse the awning moves a few millimetres).
05. Keep the ■ key pressed and wait for the motor to perform 3 movements. Upon completion, release the key.
06. • **To memorize the FIRST “H” height:** on the transmitter you are using for this procedure, keep the ▲ and ▼ keys pressed simultaneously and wait for the motor to perform 4 movements. Upon completion, release the keys.
• **To memorize the NEXT “H” height:** on the new unmemorized transmitter keep the desired key pressed and wait for the motor to perform 4 movements. Upon completion, release the key.



Note – When performing the procedure, at any time you can cancel it by keeping the ■ and ▼ keys pressed simultaneously for 4 seconds. Otherwise, do not press any key and wait 60 seconds for the motor to perform 6 movements.

5.10 - Memorising a SECOND (third, fourth, etc.) transmitter

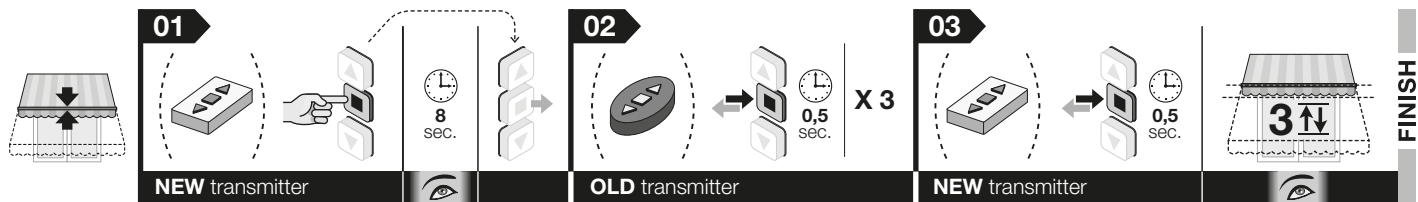
To perform these procedures you must have a transmitter (“old”) already memorised.

5.10.1 - Memorising a second transmitter “Mode I”

Warning! – This procedure memorises the new transmitter in “Mode I”, regardless of the Mode in which the old transmitter was memorised.

Before starting the procedure, bring the awning to the midpoint of its stroke.

01. (on the new transmitter) keep the ■ key pressed for 8 seconds and then release it (in this case the motor does not perform any movement).
02. (on the old transmitter) Give 3 pulse to the ■ key, provided it has already been memorized.
03. (on the new transmitter) Give 1 pulse to the ■ key. After a while the motor performs 3 movements to confirm the memorisation. **Warning!** If the motor performs 6 movements, it means that its memory is full.



Note – When performing the procedure, at any time you can cancel it by keeping the ■ and ▼ keys pressed simultaneously for 4 seconds. Otherwise, do not press any key and wait 60 seconds for the motor to perform 6 movements.

5.10.2 - Memorising a second transmitter in “Mode II”

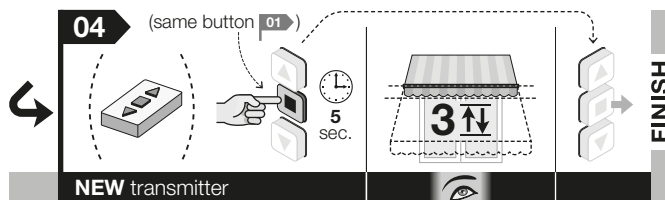
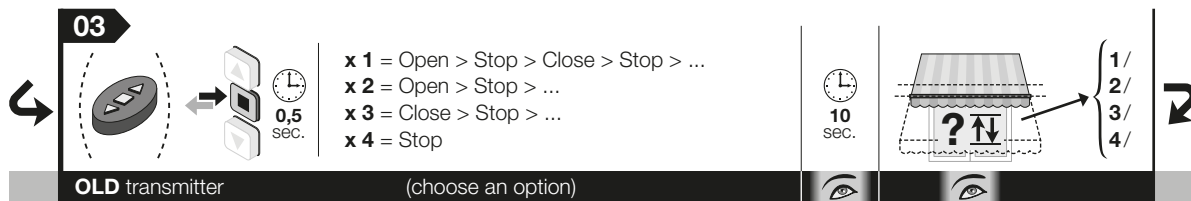
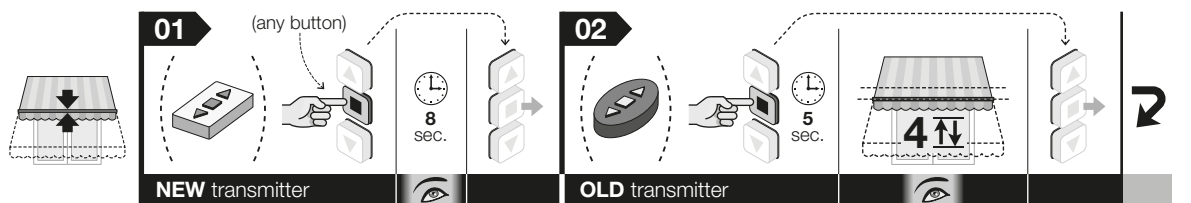
Warning! – This procedure memorises the new transmitter in “Mode II”, regardless of the Mode in which the old transmitter was memorised.

Before starting the procedure, bring the awning to the midpoint of its stroke.

01. (on the new transmitter) Hold the key to be memorised down for 8 seconds (for example: the ■ key), then release it (in this case the motor does not perform any movement).
02. (on the old transmitter) Keep the ■ key pressed and wait for the motor to perform 4 movements. Upon completion, release the key.
03. (on the old transmitter) Briefly press the ■ key a certain number of times depending on the and you want to memorise:
 - 1 pulse = step-by-step command (Open > Stop > Close > Stop > ...)
 - 2 pulses = Open > Stop > ... command
 - 3 pulses = Close > Stop > ... command
 - 4 pulses = Stop command

After about 10 seconds, the motor performs a number of movements equal to the number impulses given with the transmitter.

04. (on the new transmitter) Press the same key as you pressed in point 01 and hold it down while the motor performs 3 movements. Upon completion, release the key. **Warning!** If the motor performs 6 movements, it means that its memory is full.



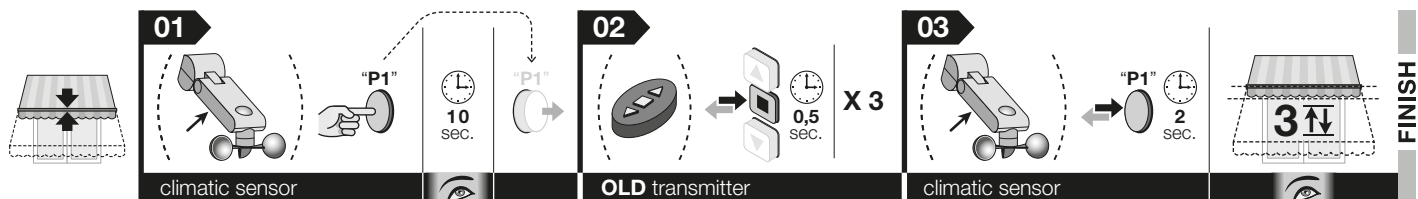
Note – When performing the procedure, at any time you can cancel it by keeping the ■ and ▼ keys pressed simultaneously for 4 seconds. Otherwise, do not press any key and wait 60 seconds for the motor to perform 6 movements.

5.11 - Memorisation of a climate sensor connected via radio

To perform the procedure you must have a transmitter (“old”) already memorised in “Mode 1”.

Before starting the procedure, bring the awning to the midpoint of its stroke.

01. (on the climate sensor) Keep the yellow key pressed for 10 seconds and then release it (in this case the motor does not perform any movement).
02. (on the old transmitter) Give for 3 pulse to the ■ key, provided it has already been memorized.
03. (on the climate sensor) Keep the yellow key pressed for 2 seconds: the motor performs 3 movements to confirm the memorisation. **Warning!** If the motor performs 6 movements, it means that its memory is full.



Note – When performing the procedure, at any time you can cancel it by keeping the ■ and ▼ keys pressed simultaneously for 4 seconds. Otherwise, do not press any key and wait 60 seconds for the motor to perform 6 movements.

5.12 - "RDC" Function: adjustment of the motor traction force when closing

This function prevents the excessive traction of the canvas at the end of the closing manoeuvre. During the final phase of this manoeuvre, the function automatically reduces the motor traction torque, based on the factory setting or the one adjusted by the installer with the following procedure.

Warning! – This function is active with the factory setting but is not applicable if the limit switches are programmed with the manual procedure (paragraph 5.6).

Before starting the procedure, bring the awning to the midpoint of its stroke.

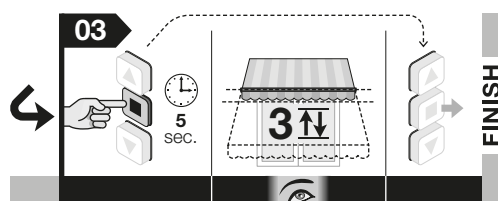
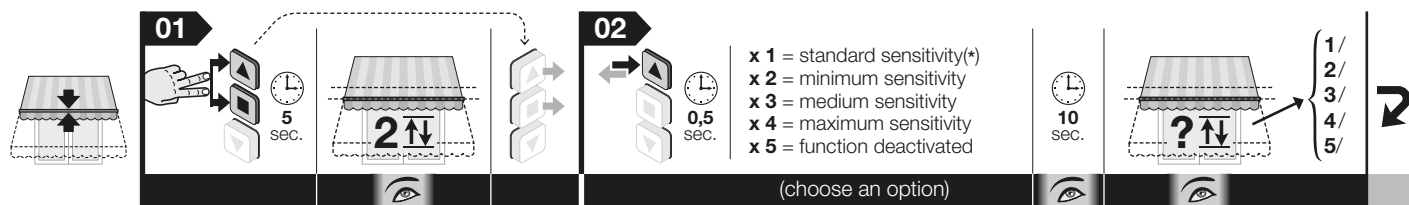
01. Keep the **■** and **▲** keys pressed simultaneously and wait for the motor to perform 2 movements. Upon completion, release the keys.

02. Briefly press the **▲** key a few times, depending on the level you want to set for the motor sensitivity:

- 1 pulse = level 1, standard sensitivity (factory setting)(*) 4 pulses = level 4, maximum sensitivity
- 2 pulses = level 2, minimum sensitivity 5 pulses = level 5, function deactivated
- 3 pulses = level 3, medium sensitivity

After about 10 seconds, the motor performs the number of movements indicated by the level number selected. **Note** – If this does not occur, cancel the procedure. this way, the adjustment is completed without changing the factory setting.

03. Keep the **■** key pressed and wait for the motor to perform 3 movements. Upon completion, release the key.



Note – When performing the procedure, at any time you can cancel it by keeping the **■** and **▼** keys pressed simultaneously for 4 seconds. Otherwise, do not press any key and wait 60 seconds for the motor to perform 6 movements.

5.13 - "FRT" Function: automatic tensioning of the canvas when opening awnings that are not fitted with a mechanism to lock the awning when opening

This function is useful to eliminate the unsightly depression of the canvas that may form when the awning is open. It is activated by programming position "2" near the limit switch "1". The function may only be used in awnings that DO NOT have any mechanism to lock the canvas in the open position. When the function is activated, when using the automation, the awning lowers to the lower limit switch "1" and then automatically raises to position "2" (the one programmed with the following procedure), stretching the canvas. The function also acts when a partial opening/closing manoeuvre is commanded. In these cases the awning stops in correspondence to the height "H" programmed and then rises automatically until the canvas is taut.

Warning! • The "FRT" function may be programmed exclusively after having programmed the limit switch heights "0" and "1". • Position "2" must be a point between limit switch "1" and limit switch "0".

Before starting the procedure, bring the awning to the midpoint of its stroke.

01. Press the **▼** key and wait for the motor to open the awning until limit switch "1".

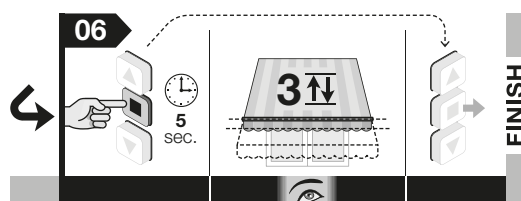
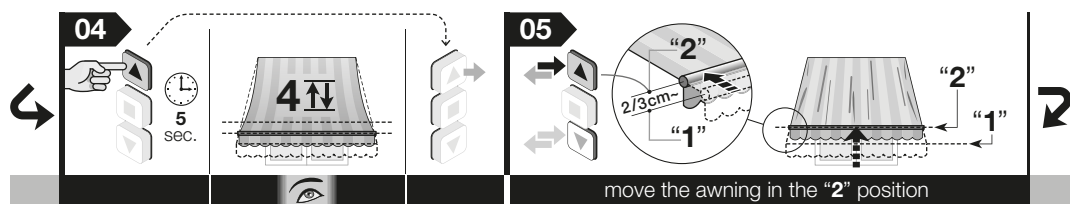
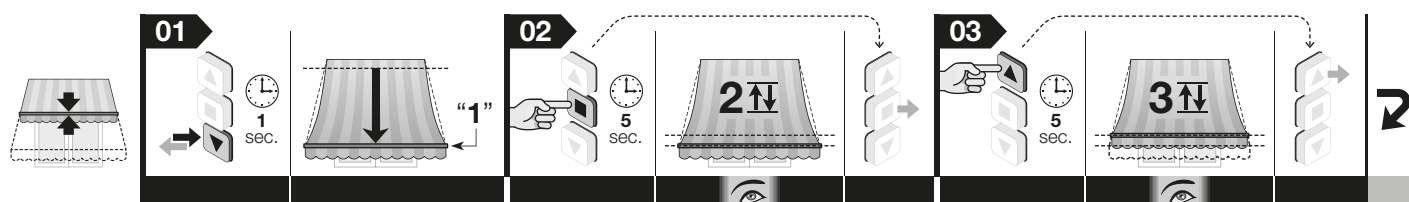
02. Keep the **■** key pressed and wait for the motor to perform 2 movements. Upon completion, release the key.

03. Keep the **▲** key pressed and wait for the motor to perform 3 movements. Upon completion, release the key.

04. Keep the **▲** key pressed again and wait for the motor to perform 4 movements. Upon completion, release the key.

05. At this point stretch the canvas by pressing the **▲** key as many times as necessary (the awning will move a few millimetres every time the key is pressed; if the key is kept pressed, the awning switches to the "hold-to-run" mode. For fine adjustment, also use the **▼** key). **Note** – the position with the canvas taut is position "2".

06. Keep the **■** key pressed and wait for the motor to perform 3 movements. Upon completion, release the key.



Note – When performing the procedure, at any time you can cancel it by keeping the **■** and **▼** keys pressed simultaneously for 4 seconds. Otherwise, do not press any key and wait 60 seconds for the motor to perform 6 movements.

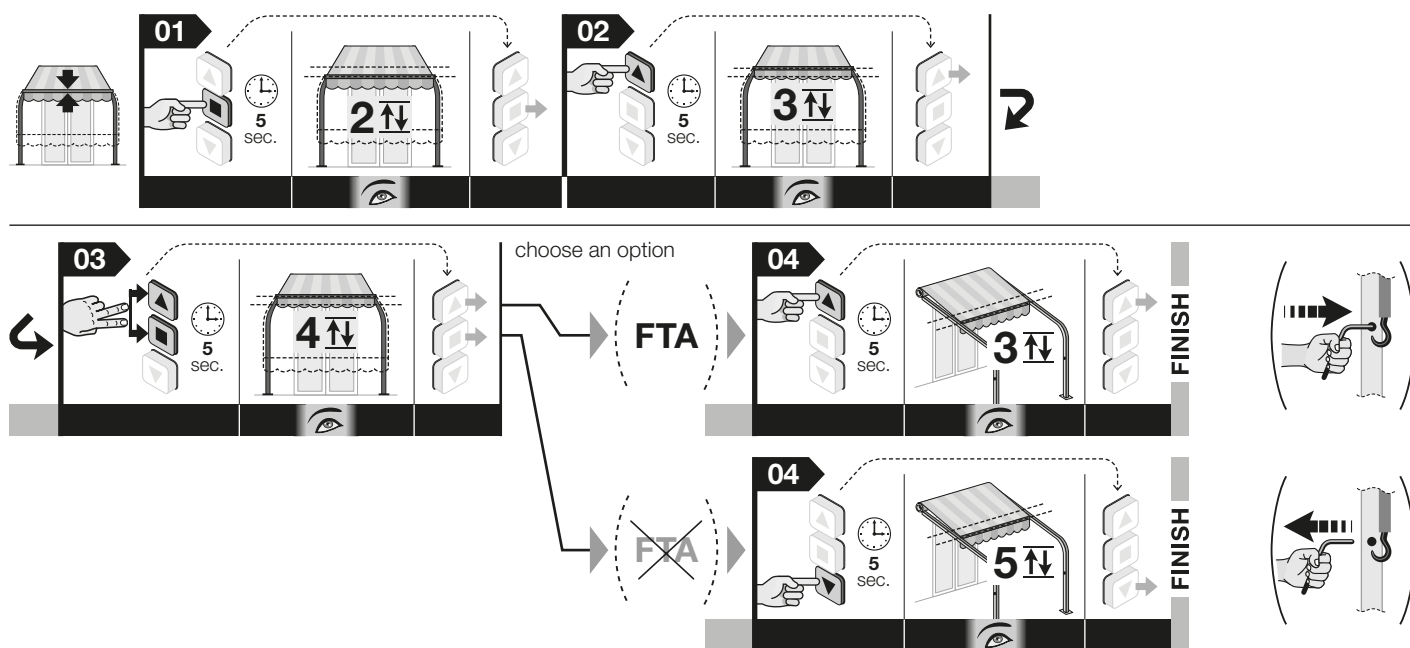
5.14 - “FTA” Function: tensioning the canvas when open awnings fitted with a manual hooking and unhooking mechanism of the awning when opening

This function is useful to eliminate the unsightly depression of the canvas that may form when the awning is open. The function may be used exclusively in awnings that let you lock the canvas in the open position through a mechanism manually attachable and detachable by the user (e.g. the bolts in stationary canopies, roller awnings with hooks, fixed arm awnings, etc). With the lock mechanism inserted and this function activated, during a closing manoeuvre the motor stops the awning in correspondence to the lock mechanism, leaving the canvas taut. To unlock the awning, first send a short Down command to manually remove the lock and finally send an UP command to the awning.

Warning! – The “FTA” function may be programmed exclusively after having programmed the limit switch heights “0” and “1”.

Before starting the procedure, bring the awning to the midpoint of its stroke.

01. Keep the **■** key pressed and wait for the motor to perform 2 movements. Upon completion, release the key.
02. Keep the **▲** key pressed and wait for the motor to perform 3 movements. Upon completion, release the key.
03. Keep the **■** and **▲** keys pressed simultaneously and wait for the motor to perform 4 movements. Upon completion, release the keys.
04. • **To activate the “FTA” function:** keep the **▲** key pressed and wait for the motor to perform 3 movements. Upon completion, release the key.
 • **To deactivate the “FTA” function:** keep the **▼** key pressed and wait for the motor to perform 5 movements. Upon completion, release the key.



Note – When performing the procedure, at any time you can cancel it by keeping the **■** and **▼** keys pressed simultaneously for 4 seconds. Otherwise, do not press any key and wait 60 seconds for the motor to perform 6 movements.

5.15 - “FTC” Function: tensioning the canvas when open awnings fitted with an automatic hooking and unhooking mechanism of the awning when opening

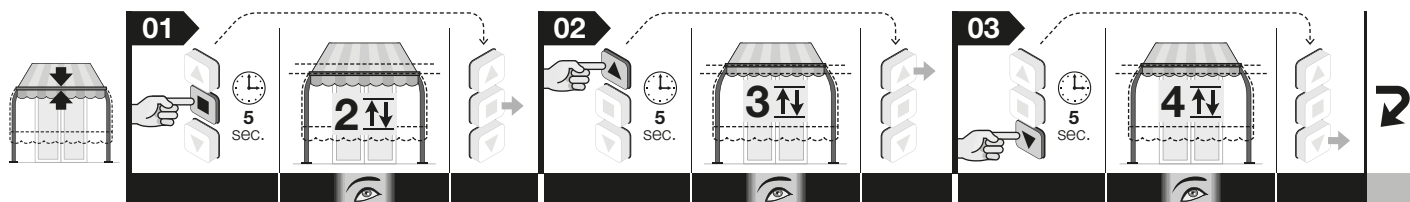
This function is useful to eliminate the unsightly depression of the canvas that may form when the awning is open. The function may be used exclusively in awnings which allow the locking of the canvas when open, through an automatic hooking/unhooking mechanism located in the limit switch “1” (e.g. stationary canopy, roller awnings with hooks, etc.). Normally this type of mechanism features 3 characteristic positions, located near each other: the “**mechanical stop**” where the canvas is hooked, **position “1”** (located a few centimetres below the mechanical stop) which allows the hooking to the canvas, **position “S”** (located a few centimetres below position “1”) which allows the unhooking of the canvas.

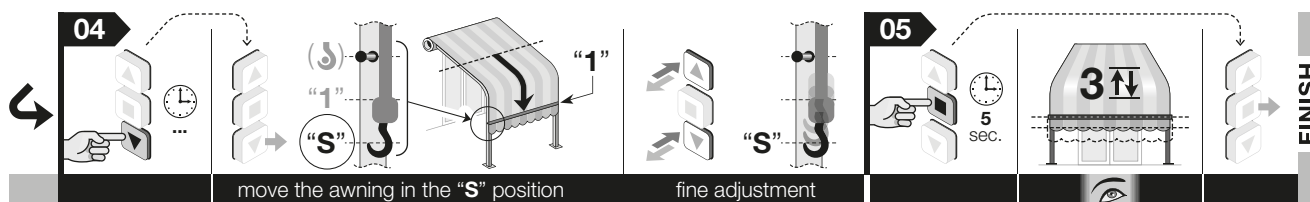
• **How to program position “1”:** this position must coincide with the height of limit switch “1”. Therefore, if limit switches “0” and “1” are already programmed it will be necessary to delete them with procedure 5.16 and adjust them again with the manual procedure (paragraph 5.6, if the awning does not have a box), or with the semiautomatic procedure (paragraph 5.7, if the awning has a box).

• **How to program position “S”:** this position is programmed with the following procedure (**note** – programming the “S” position also activates the FTC function at the same time).

Before starting the procedure, bring the awning to the midpoint of its stroke.

01. Keep the **■** key pressed and wait for the motor to perform 2 movements. Upon completion, release the key.
02. Keep the **▲** key pressed and wait for the motor to perform 3 movements. Upon completion, release the key.
03. Keep the **▼** key pressed and wait for the motor to perform 4 movements. Upon completion, release the key.
04. **Adjustment of the position “S”:** keep the **▼** (or **▲**) key pressed until the awning reaches the suitable “S” position (in addition to point “1”). For any fine adjustment of this position, press the **▼** and **▲** keys (at each pulse the awning moves a few millimetres).
05. Keep the **■** key pressed and wait for the motor to perform 3 movements. Upon completion, release the key.





Note – When performing the procedure, at any time you can cancel it by keeping the **■** and **▼** keys pressed simultaneously for 4 seconds. Otherwise, do not press any key and wait 60 seconds for the motor to perform 6 movements.

5.16 - Total or partial deletion of memory

This procedure allows you to choose under point 05 the data that you want to delete.

5.16.1 - Procedure performed with a transmitter memorised in “Mode I”

Before starting the procedure, bring the awning to the midpoint of its stroke.

01. Keep the **■** key pressed and wait for the motor to perform 2 movements. Upon completion, release the key.

02. Keep the **▲** key pressed and wait for the motor to perform 3 movements. Upon completion, release the key.

03. Keep the **■** key pressed and wait for the motor to perform 3 movements. Upon completion, release the key.

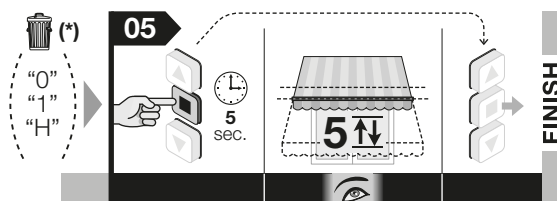
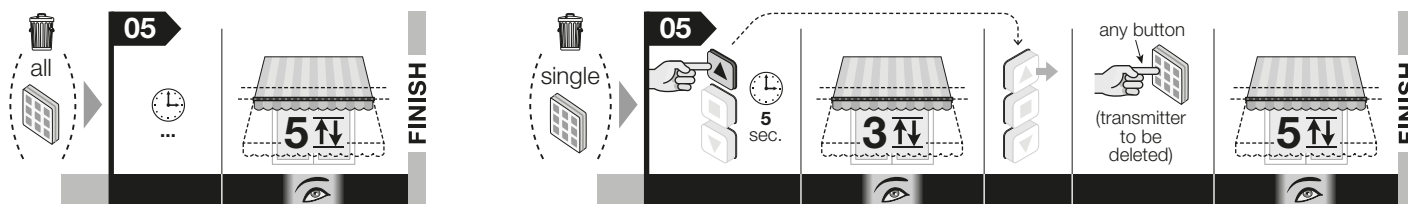
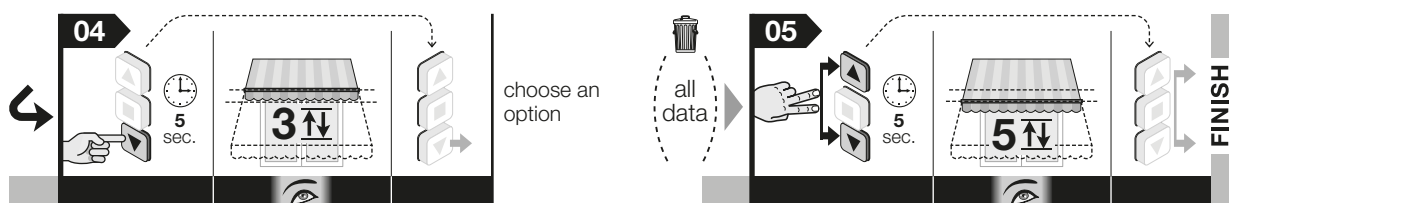
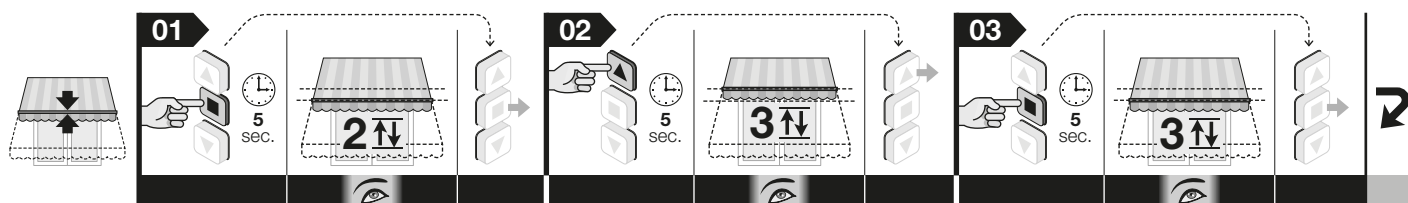
04. Keep the **▼** key pressed and wait for the motor to perform 3 movements. Upon completion, release the key.

05. • To cancel the entire memory: Keep the **▲** and **▼** keys pressed and wait for the motor to perform five movements. Upon completion, release the keys.

• **To delete all memorised transmitters:** do not press any key and wait until the motor performs 5 movements.

• **To delete a single memorised transmitter:** hold down the **▲** key and wait for the motor to perform 3 movements. Now release the key. Lastly, press the button of the transmitter you wish to delete: the motor performs 5 movements.

• **To cancel just the parameters:** keep the **■** key pressed and wait for the motor to perform 5 movements. Upon completion, release the key.



Note – When performing the procedure, at any time you can cancel it by keeping the **■** and **▼** keys pressed simultaneously for 4 seconds. Otherwise, do not press any key and wait 60 seconds for the motor to perform 6 movements.

5.16.2 - Procedure performed with an unmemorised transmitter

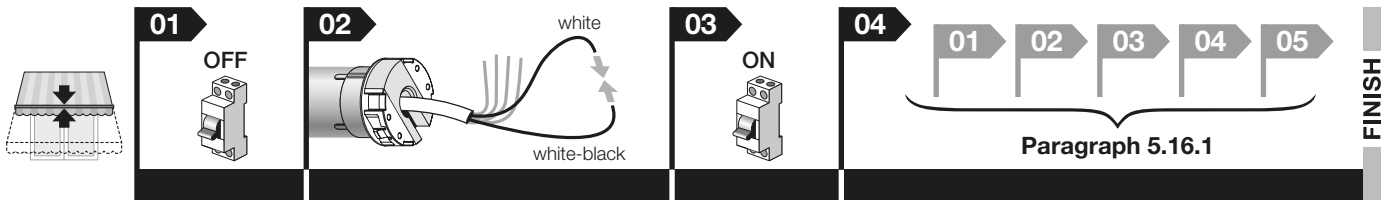
Before starting the procedure, bring the awning to the midpoint of its stroke.

01. Disconnect power supply from motor.

02. Connect the White and White-black wires to each other.

03. Disconnect power supply from motor.

04. Lastly, perform the procedure indicated in paragraph 5.16.1.

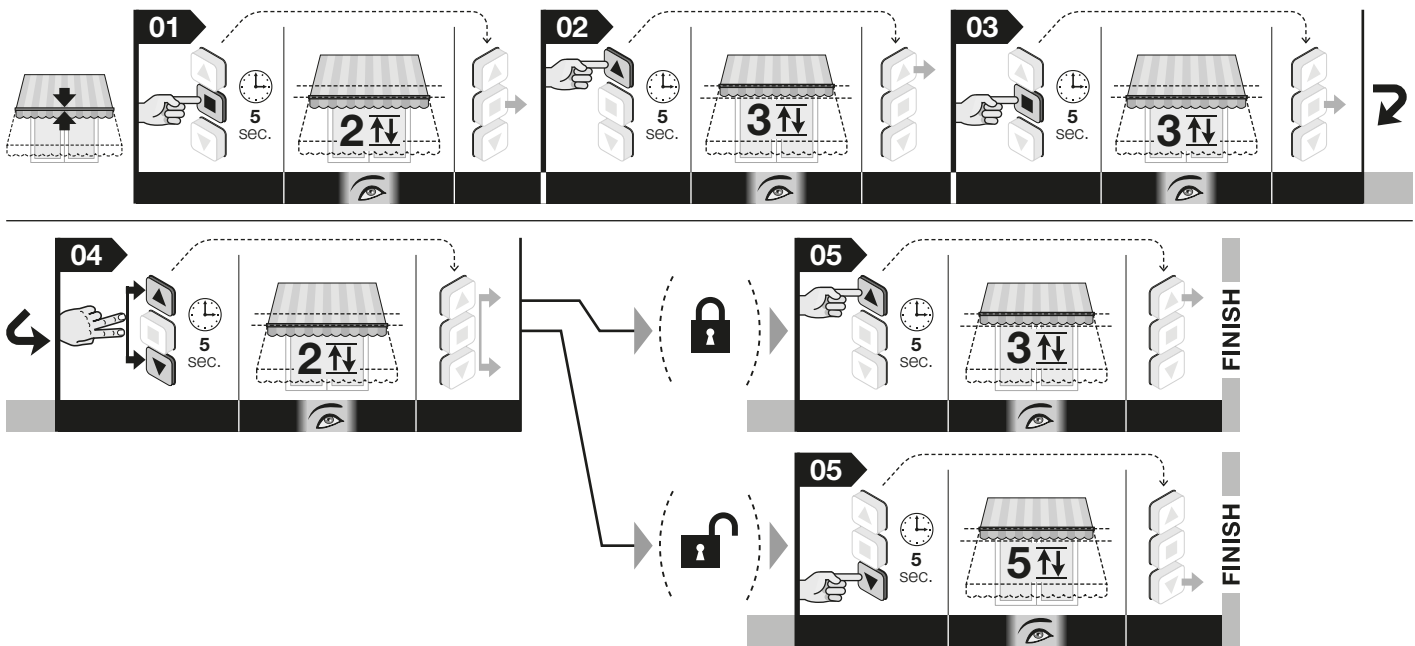


5.17 - Locking and unlocking the memory

This procedure allows you to lock or unlock the memory to prevent accidental memorisation of other transmitters not included in the system.

Before starting the procedure, bring the awning to the midpoint of its stroke.

01. Keep the **■** key pressed and wait for the motor to perform 2 movements. Upon completion, release the key.
02. Keep the **▲** key pressed and wait for the motor to perform 3 movements. Upon completion, release the key.
03. Keep the **■** key pressed and wait for the motor to perform 3 movements. Upon completion, release the key.
04. Keep the **▲** and **▼** keys pressed simultaneously and wait for the motor to perform 2 movements. Upon completion, release the keys.
05. • **To unlock the memory:** Keep the **▲** key pressed and wait for the motor to perform 3 movements. Upon completion, release the key.
• **To lock the memory:** Keep the **▼** key pressed and wait for the motor to perform 5 movements. Upon completion, release the key.



Note – When performing the procedure, at any time you can cancel it by keeping the **■** and **▼** keys pressed simultaneously for 4 seconds. Otherwise, do not press any key and wait 60 seconds for the motor to perform 6 movements.

6 OPTIONAL ACCESSORIES

6.1 - Control pushbutton strip (wall-mounted)

6.1.1 - Installation of the pushbutton strip

this accessory can be used as an alternative to the radio transmitter to send, by wire, the controls to the motor when using the automation.

Installation warnings:

- it is recommended to use an unstable pushbutton strip with interlocked pushbuttons.
- The mechanical operation of the push buttons must be exclusively of the “with operator present” type: in other words, and they are released, they must return to their initial position. **Note** – When the limit switches are already adjusted, all you need to do is simply press the pushbutton with one pulse to activate the movement of the awning which will terminate automatically when it reaches the limits which you have adjusted.
- You can choose models with one or two pushbuttons according to your needs: The model with two push buttons activates the Raise and Lower input; the model with one pushbutton can activate the TTBUS / Open / Step-to-step (the type of

input is selected with the **procedure 6.A**).

- The pushbutton strip must be positioned as follows:
 - in a place that is not accessible to outsiders/strangers;
 - where you can see the awning from but far from its moving parts;
 - on the side of the awning where there is the electrical cord from the motor and the power cord from the electrical mains (**fig. 4-h**);
 - at a height no less than 1.5 m from the floor/ground.

6.1.2 - Connecting the pushbutton strip

CAUTION! – The maximum length of the cables used to connect a wall-mounted panel or a relay, is 100 m.

A - Pushbutton strip with 2 push buttons (wires to use: White + White-Orange + White-black): to connect this accessory, see **fig. 3**.

B - Pushbutton strip with 1 push buttons (wires to use: White + White-black): to connect this accessory, see **fig. 3**.

Once you have completed the hookup, run the **procedure 6.A** to allocate the “Open” or “Step-by-step” command to the key.

6.2 - Climate sensors for wind, sun, rain

The climate sensors of the NEMO and VOLO series let you move the awning automatically, depending on weather conditions.

Wires to use to connect the sensors by wire:

White-orange + White-black (some models are connected exclusively via radio).

Up to five tubular motors can be connected to one accessory, respecting the polarity of the signals (connect the white-black wires of all the motors to each other and connect that white-orange wires of all motors to reach other).

Warnings:

- After connection (or after memorization) of a climate sensor, you must make your **procedure 6.A** to select the command to associate with a single button (“Open” or “step by step” command).
- For all the models of the NEMO series and the Volo SR and Volo ST models: the “sun” and “wind” intervention thresholds may be adjusted exclusively in the climate sensor. Please refer to the sensor instruction manual.
- For all the Volo and Volo S models: the “sun” and “wind” intervention thresholds may be adjusted exclusively in the tubular motor. Please refer to **procedures 6.B** and **6.C** in this instruction manual.
- The climate sensors must not be considered as devices to increase the safety of the awning when it rains or there is strong wind. Nice declines all liability for any material damages that occur due to atmospheric events not detected by the sensors.
- These climate sensors must not be considered as safety devices that can eliminate failures in the awning caused by the effects of rain or strong winds; a mere electricity blackout, in fact, would make the automatic movement of the awning impossible. Consequently, these sensors must be considered as components of the automated device, that are useful in protecting the awning. Nice declines all liability for any material damages that occur due to atmospheric events not detected by the sensors.

6.2.1 - Memorisation of a climate sensor connected via radio

To store a climate sensor to perform the **procedure 5.11**.

6.2.2 - Definitions and conventions

- **Manual “Sun On” Command** = enables the reception, by the motor, of automatic commands transmitted by the “Sun” sensor if present in the installation. When reception is enabled, the user can send manual commands at any time: these override the automatic operation of the automated device.
- **Manual “Sun Off” Command** = enables the reception, by the motor, of automatic commands transmitted by the “Sun” sensor, if present in the installation. When the reception is disabled, the automated device operates exclusively with the manual commands sent by the user. The “Wind” and “Rain” sensors cannot be disabled because they protect the automated device from these atmospheric phenomena.
- **“Above-threshold” intensity of sun/wind** = condition where the intensity of the atmospheric phenomenon corresponds to high values above the set threshold.
- **“Below-threshold” intensity of sun/wind** = condition where the intensity of the atmospheric phenomenon corresponds to low values below the set threshold.
- **“Wind protection”** = a condition in which the system inhibits all the awning opening commands due to the intensity of the wind above the threshold.
- **“Presence of rain”** = a condition in which the system detects the presence of rain, with respect to the previous condition of “absence of rain”.
- **“Manual command”** = UP, DOWN or Stop command sent by the user by means of a transmitter.

6.2.3 - Behaviour of the motor in the presence of climate sensors

• Behaviour of the automated device when there is a Sun sensor: fig. 7

When the intensity of the sunlight exceeds the set threshold for at least 2 minutes, the motor automatically lowers the awning. When the intensity of the sunlight goes below the specified delay threshold and remains there for at least 15 minutes, the motor automatically raises the awning. **N.B.** – the delay threshold is about 50% of the value for the specified sunlight threshold.

Momentary reductions in sunlight intensity, that last a short time or less than 15 minutes, do not affect the overall cycle. Manual commands sent by the user are in addition to the automatic commands.

The factory setting for the solar sensor setpoint is level 3 (= 15 Klux). If you wish to change this value use **procedure 6.B**.

• Behaviour of the automated device when there is a Rain sensor: fig. 8

The rain sensor recognises two states: “absence of rain” and “presence of rain”. When the motor receives the message “presence of rain”, it automatically activates the manoeuvre (Up or Down) that the installer has programmed for this condition(*). The rain sensor is disabled automatically when it detects the absence of rain for at least 15 minutes.

(*) - If it starts to rain, the system automatically commands the awning to be raised (factory setting). To change this setting, to perform the **procedure 6.D**.

The automatic rain function is deactivated after the absence of rain has been verified for at least 15 minutes. In this case, the manual commands are always active and are in addition to the automatically-generated command. If a manual command is sent that is contrary to the previous automatic command, the system carries out the manual command and at the same time starts a 15 minute timer that regenerates the programmed automatic command once this time elapses (e.g. the closure of the awning).

Example: 1) The awning is open. 2) It starts raining. 3) The awning closes. 4) The user forces it to open after a few moments. 5) The awning opens again. 6) 15 minutes after being opened, the awning closes again automatically. 7) It stops raining for at least 15 minutes. 8) The user again opens the awning. 9) The awning remains open.

• Behaviour of the automated device when there is a Wind sensor: fig. 9

When the intensity of the wind exceeds the set threshold, the system activates the wind protection and automatically raises the awning. With the wind protection activated, the manual commands are deactivated and it is not possible to lower the awning. At the end of the barring period, the manual commands are reactivated and after 10 minutes, automatic operation is restored.

The factory setting for the wind sensor setpoint is level 3 (= wind at 15 Km/h). If you wish to change this value use **procedure 6.C**.

6.2.4 - Priority among atmospheric events and operating priority among the “Sun”, “Rain” and “Wind” sensors

Each condition has a priority level. The scale of priorities is the following:

1-wind, 2-rain, 3-sun.

Wind has the highest priority. A condition with a higher priority neutralises the one with a lower priority.

Example: 1) On a beautiful sunny day the awning is lowered due to the effect of the sunlight. 2) If some clouds arrive and a drop of rain falls on the sensor, the motor neutralises the “sun present” condition and commands the specified manoeuvre for the “rain present” condition. 3) If the speed of the wind increases and exceeds the set threshold, the motor deactivates the specified automatic sequence for rain and will send a command to raise the awning and locks it in the closed position for as long as it is windy. 4) When the thunderstorm stops, the wind alarm condition elapses after 10 minutes and, at this point, if the “rain presence” condition persists, the setting for this is reactivated and the established manoeuvre is commanded again. When the rain condition ceases, the routine for sun conditions are re-established. If the sunlight intensity exceeds the threshold, the awning will re-open. When the sunlight intensity falls below the threshold level for at least 15 minutes, a command will be sent to raise the awning.

6.2.5 - “Sun-On” and “Sun-Off” commands sent by the user

The user may activate (“Sun-On”) or deactivate (“Sun-Off” command) the reception by the motor of automatic commands transmitted by the climate sensors present in the installation. If the user sends the “Sun-On” command (automatic function enabled) and at that moment it is sunny, the system commands the awning to open. If the automatic device was already enabled, when another “Sun-On” command is sent, the system is reset and the algorithms start again from scratch, with immediate effect. If a “Sun-On” command is sent but the level of sunlight does not allow the awning to open (the sunlight threshold is not exceeded), the motor will generate a command to close it according to the conditions at that time. If the conditions are not such as to initiate a movement (e.g. the awning is closed and there is no sun), when the “Sun-On” command is sent, the motor will remain still. If a “Sun Off” order is sent, the automatic function is disabled.

Example: the awning is closed; a “Sun-On” command is sent; if it is sunny, the awning opens immediately without waiting 2 minutes.

By disabling the automatic function, the automatic movements associated with the variations in sunlight intensity are blocked. **Warning** – The “Wind” and “Rain” sensors cannot be deactivated.

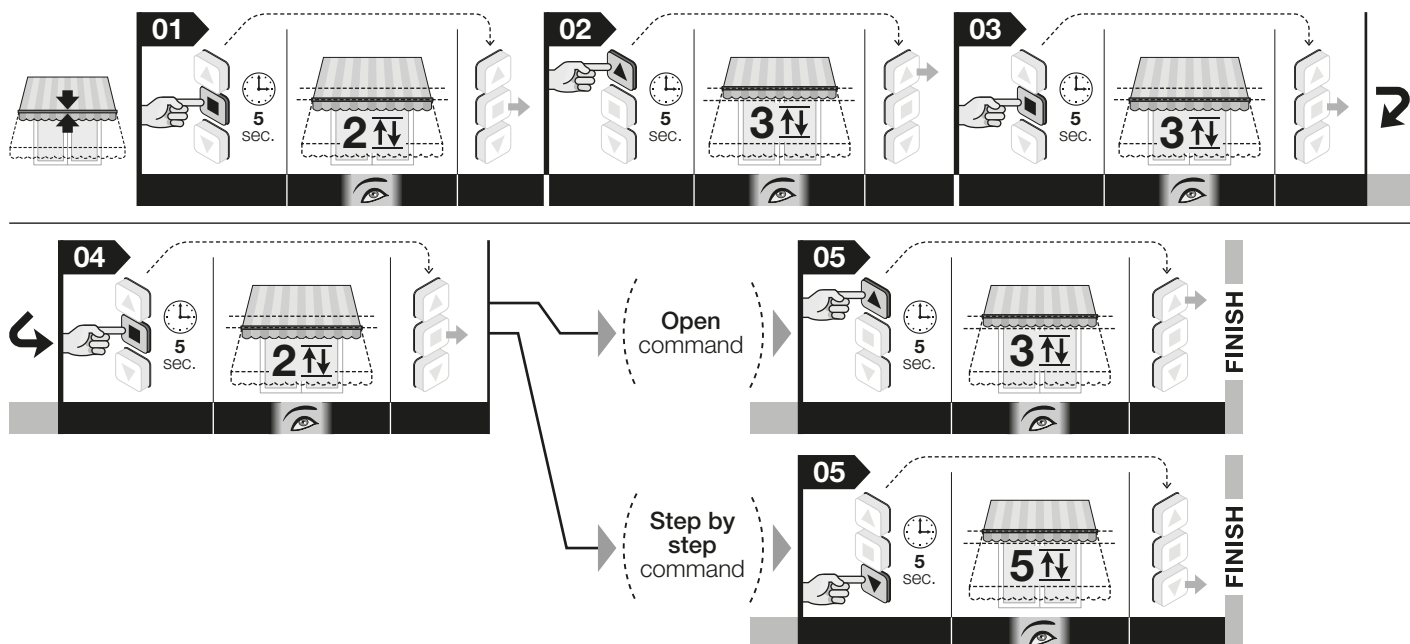
PROCEDURES FOR OPTIONAL ACCESSORIES
(ref. Chapter 6)



6.A - Allocating a command (“Open” or “Step-by-step”) to a key (ref. paragraph 6.1)

Before starting the procedure, bring the awning to the midpoint of its stroke.

01. Keep the **■** key pressed and wait for the motor to perform 2 movements. Upon completion, release the key.
02. Keep the **▲** key pressed and wait for the motor to perform 3 movements. Upon completion, release the key.
03. Keep the **■** key pressed and wait for the motor to perform 3 movements. Upon completion, release the key.
04. Keep the **■** key pressed and wait for the motor to perform 2 movements. Upon completion, release the key.
05. • **To assign the Open command to a pushbutton:** Keep the **▲** key pressed and wait for the motor to perform 3 movements. Upon completion, release the key.
 • **To assign the Step-By-Step command to a pushbutton:** Keep the **▼** key pressed and wait for the motor to perform 5 movements. Upon completion, release the key.



Note – When performing the procedure, you can cancel the programming at any time by keeping the **■** and **▼** keys pressed simultaneously for 4 seconds. Alternatively, do not press any keys and wait 60 seconds for the motor to perform 6 movements.

6.B - Adjustment of “Sun” climate sensor (ref. paragraph 6.2.3)

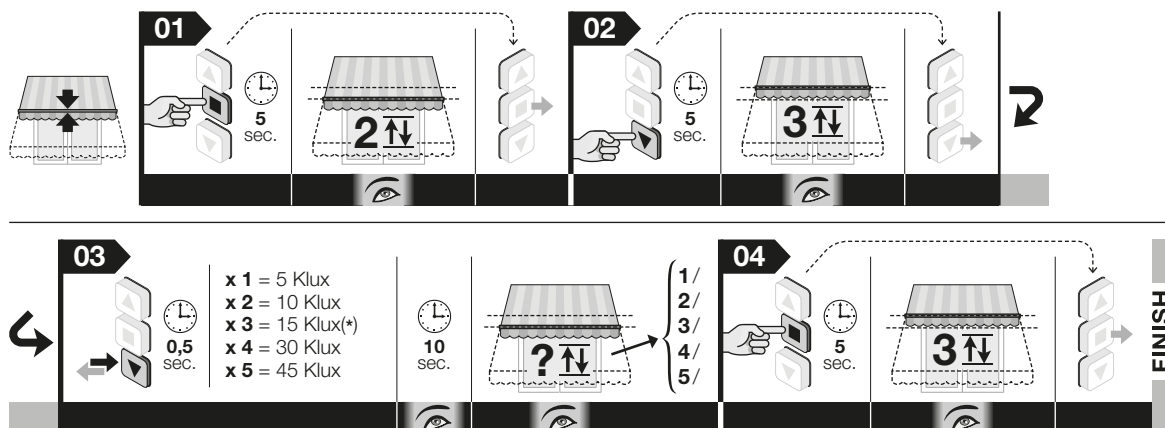
At the factory, the intervention threshold is set at level 3 and to change it you must take the following steps.

Before starting the procedure, bring the awning to the midpoint of its stroke.

01. Keep the **■** key pressed and wait for the motor to perform 2 movements. Upon completion, release the key.
02. Keep the **▼** key pressed and wait for the motor to perform 3 movements. Upon completion, release the key.
03. Briefly press the **▼** key a few times, depending on the level you want to set for the intervention threshold:
 - 1 press = 5 Klux
 - 2 presses = 10 Klux
 - 3 presses = 15 Klux (factory setting)*
 - 4 presses = 30 Klux
 - 5 presses = 45 Klux

After about 10 seconds, the motor performs the number of movements indicated by the level number selected. **Note** – If this does not occur, cancel the procedure. this way, the adjustment is completed without changing the factory setting.

04. Keep the **■** key pressed and wait for the motor to perform 3 movements. Upon completion, release the key.



Notes • When performing the procedure, you can cancel it at any time by keeping the **■** and **▼** keys pressed simultaneously for 4 seconds. Otherwise, do not press any key and wait 60 seconds for the motor to perform 6 movements. • If you use a sensor equipped with a “trimmer”, you must read the sensor instructions and adjust the threshold directly on the sensor.

6.C - Adjustment of "Wind" climate sensor (ref. paragraph 6.2.3)

At the factory, the intervention threshold is set at level 3 and to change it you must take the following steps.

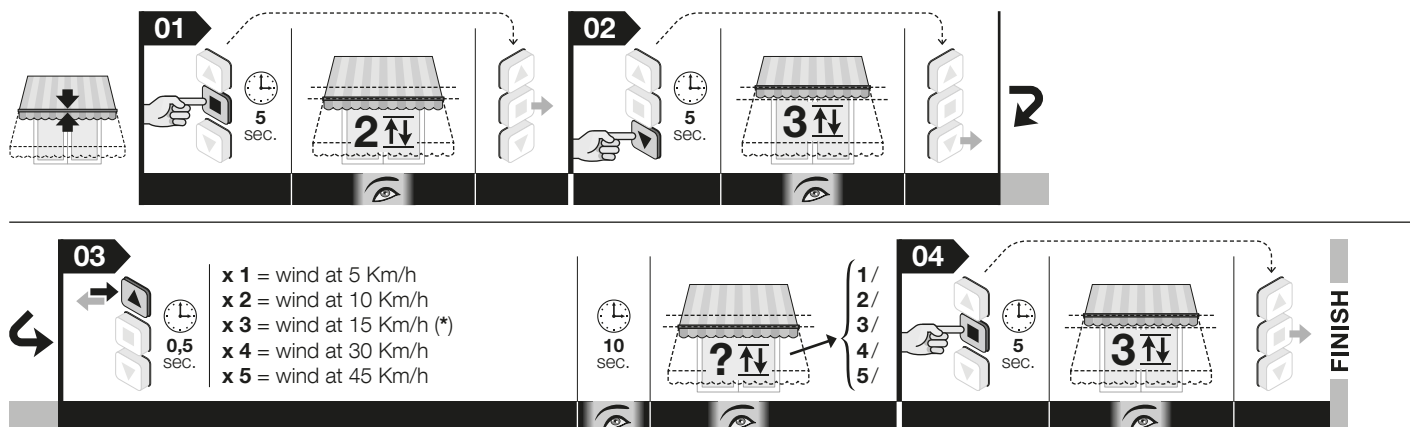
Before starting the procedure, bring the awning to the midpoint of its stroke.

01. Keep the **■** key pressed and wait for the motor to perform 2 movements. Upon completion, release the key.
02. Keep the **▼** key pressed and wait for the motor to perform 3 movements. Upon completion, release the key.
03. Briefly press the **▲** key a few times, depending on the level you want to set for wind threshold:

- 1 press = wind at 5 Km/h
- 2 presses = wind at 10 Km/h
- 3 presses = wind at 15 Km/h (factory settings)*
- 4 presses = wind at 30 Km/h
- 5 presses = wind at 45 Km/h

After about 10 seconds, the motor performs the number of movements indicated by the level number selected. **Note** – If this does not occur, cancel the procedure. This way, the adjustment is completed without changing the factory setting.

04. Keep the **■** key pressed and wait for the motor to perform 3 movements. Upon completion, release the key.

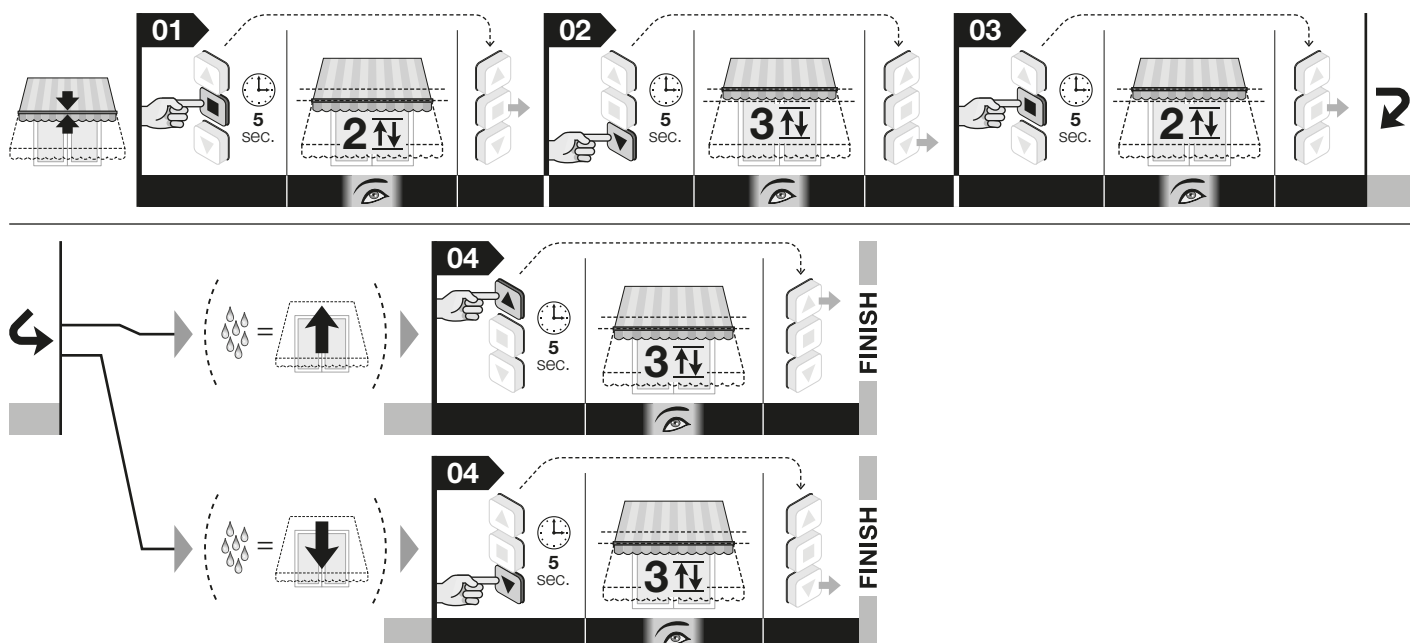


Notes • When performing the procedure, you can cancel it at any time by keeping the **■** and **▼** keys pressed simultaneously for 4 seconds. Otherwise, do not press any key and wait 60 seconds for the motor to perform 6 movements. • If you use a sensor equipped with a "trimmer", you must read the sensor instructions and adjust the threshold directly on the sensor.

6.D - Programming the movement (Ascent or Descent) that the motor must perform automatically when it starts to rain (ref. paragraph 6.2.3)

Before starting the procedure, bring the awning to the midpoint of its stroke.

01. Keep the **■** key pressed and wait for the motor to perform 2 movements. Upon completion, release the key.
02. Keep the **▼** key pressed and wait for the motor to perform 3 movements. Upon completion, release the key.
03. Keep the **■** key pressed and wait for the motor to perform 2 movements. Upon completion, release the key.
04. Programme the movement that the motor must perform automatically when it starts to rain, by selecting one of the following options:
 - to programme the **Raising** of the awning: keep the **▲** key pressed and wait for the motor to perform 3 movements. Upon completion, release the key.
 - to programme the **Lowering** of the awning: keep the **▼** key pressed and wait for the motor to perform 3 movements. Upon completion, release the key.



Note – When performing the procedure, you can cancel the programming at any time by keeping the **■** and **▼** keys pressed simultaneously for 4 seconds. Alternatively, do not press any keys and wait 60 seconds for the motor to perform 6 movements.

7 WARNINGS FOR ORDINARY USE OF THE MECHANISM

7.1 - Maximum continuous work cycle

In general, the motors in the "Era" line were designed for residential use and therefore for discontinuous use. They guarantee a maximum operating time of 4 minutes and in cases of overheating (e.g. caused by continuous prolonged operation) a "thermal protector" for safety intervenes to cut out the power supply, restoring it when the temperature returns to normal.

7.2 - "Automatic limit switch update" function

The limit switches adjusted through the impact of the box against the structure or other mechanical blocks are verified by the "Automatic limit switch update" function every time the awning performs a maneuver and bumps into its limit switches. This allows the function to measure the new limit switch values and update the existing ones, thereby recovering any slack that may have occurred throughout time due to wear and/or thermal shocks to which the parts of the structure are subjected. The constant update of the heights allows the awning to always reach the limit switch with maximum precision.

This function is not activated when the stroke of the awning lasts for less than 2.5 seconds and does not reach the limit switch.

7.3 - Commanding partial opening/closing of the awning (height "H")

In general, to command the partial opening/closing of the awning, press the key associated with the partial height during programming (for more information, read point 06 of procedure 5.9). If the transmitter has only three keys and only one "H" height is memorised, simultaneously press keys ▲ and ▼ to recall this height.

What to do if... (troubleshooting guide)

- Powering an electrical phase, the motor does not move:**
After excluding the possibility that thermal protection is active, in which case it is sufficient to wait for the motor to cool down, make sure the mains voltage corresponds to the values indicated in the technical characteristics of this manual by measuring the electricity between the "common" wire and the electrical phase wire supplied with current. Finally, try to supply the opposite electrical phase.
- When sending a Raise command, the motor does not start:**
This can happen if the awning is near the Upper limit switch ("0"). In this case you must lower the awning a little bit and give the Raise command again.
- The system operates in the emergency condition with an operator present:**
 - Check to see if the motor has undergone a significant thermal or mechanical shock.
 - Make sure each part of the motor is still in good condition.
 - Perform the deletion procedure (paragraph 5.16) and adjust the limit switches again.

Disposal of the product

As in installation operations, disposal operations must be performed by qualified personnel at the end of the product's lifespan.

The product is made of various types of materials: some of them may be recycled, while others must be scrapped. Find out about recycling and disposal systems in use in your area for this product category. **Warning!** – Some parts of the product may contain polluting or hazardous substances which, if released to the environment, may cause serious damage to the environment or to human health. As indicated by the symbol appearing here, the product may not be disposed of with other household wastes. Separate the waste into categories for disposal, according to the methods established by current legislation in your area, or return the product to the retailer when purchasing a new version. **Warning!** – Local legislation may impose heavy fines in the event of illegal disposal of this product.



The product's packaging materials must be disposed of in full compliance with local regulations.

Technical specifications

- **Power supply voltage and frequency; current and power; torque and speed:** consult data on the motor dataplate.
- **Power drawn in Stand-by mode:** 0.5 W
- **Resolution of the encoder:** 2,7°
- **Continuous operation time:** 4 minutes (maximum).
- **Minimum operating temperature:** -20°C
- **Level of protection:** IP 44

Notes:

- All technical specifications stated in this section refer to an ambient temperature of 20°C (± 5°C).
- Nice reserves the right to apply modifications to products at any time when deemed necessary, maintaining the same intended use and functionality.

CE declaration of conformity

Declaration number: **453/Era Mat T**

Nice S.p.A. hereby declares that the products:

- **E MAT ST 324**
- **E MAT ST 524**
- **E MAT ST 611**
- **E MAT ST 1011**
- **E MAT MT 426**
- **E MAT MT 1026**
- **E MAT MT 817**
- **E MAT MT 1517**
- **E MAT MT 3017**
- **E MAT MT 4012**
- **E MAT MT 5012**
- **E MAT MKT 1517**
- **E MAT MKT 3017**
- **E MAT MKT 5012**
- **E MAT LT 5517**
- **E MAT LT 6517**
- **E MAT LT 7517**
- **E MAT LT 8012**
- **E MAT LT 10012**
- **E MAT LT 12012**

conform to the essential requisites and other pertinent provisions laid down by directives **1999/5/EC, 2014/35/UE, 2014/30/UE**. The CE declaration of conformity can be consulted and printed at www.nice-service.com all are requested from Nice S.p.A.

Ing. **Roberto Griffa**
(Chief Executive Officer)