



### **Tubular Motor**

**EN** - Instructions and warnings for installation and use



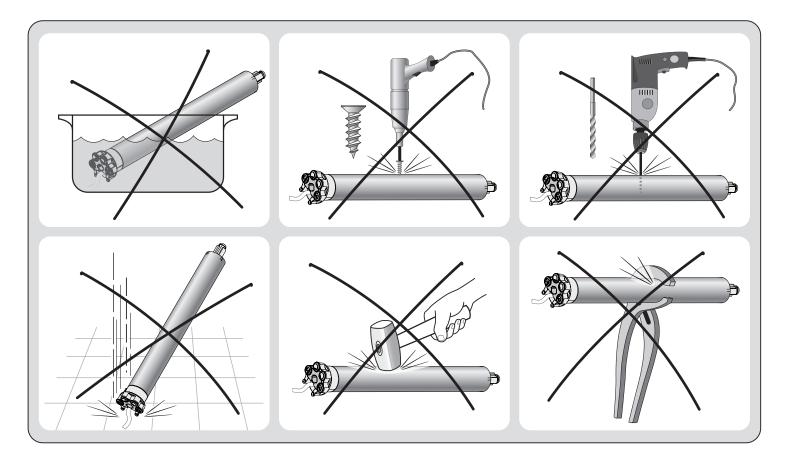
#### **GENERAL WARNINGS: SAFETY - INSTALLATION - USE (original instructions in Italian)**

## ATTENTIONImportant safety instructions. Follow all instructions as improper installation may cause serious damageATTENTIONImportant safety instructions. It is important for you to comply with these instructions for your own and other<br/>people's safety. Keep these instructions

- Before commencing the installation, check the "Technical characteristics" (in this manual), in particular whether this product is suitable for automating your guided part. If it is not suitable, DO NOT continue with the installation
- The product cannot be used before it has been commissioned as specified in the chapter on "Testing and commissioning"
- ATTENTION According to the most recent European legislation, the implementation of an automation system must comply with the harmonised standards provided by the Machinery Directive in force, which enables declaration of the presumed conformity of the automation. Taking this into account, all operations regarding connection to the electricity grid, as well as product testing, commissioning and maintenance, must be performed exclusively by a qualified and skilled technician!
- Before proceeding with the installation of the product, check that all the materials are in good working order and suited to the intended applications
- This product is not intended to be used by persons (including children) whose physical, sensory or mental capacities are reduced, or who lack the necessary experience or skill
- Children must not play with the appliance
- Do not allow children to play with the fixed control devices of the product. Keep the remote controls away from children
- **ATTENTION** In order to avoid any danger from inadvertent resetting of the thermal cut-off device, this appliance must not be powered through an external switching device, such as a timer, or connected to a supply that is regularly powered or switched off by the circuit
- Provide a disconnection device (not supplied) in the plant's power supply grid, with a contact opening distance permitting complete disconnection under the conditions dictated by overvoltage category III
- Handle the product with care during installation, taking care to avoid crushing, denting or dropping it, or allowing contact with liquids of any kind. Keep the product away from sources of heat and naked flames. Failure to observe the above can damage the product, and increase the risk of danger or malfunction. Should this happen, stop installation immediately and contact Customer Service
- The manufacturer assumes no liability for damage to property, items or persons resulting from non-compliance with the assembly instructions. In such cases the warranty for material defects is excluded
- The weighted sound pressure level of the emission A is lower than 70 dB(A)
- Cleaning and maintenance to be carried out by the user must not be carried out by unsupervised children
- Before working on the system (maintenance, cleaning), always disconnect the product from the mains power supply
- Check the system periodically, in particular all cables, springs and supports to detect possible imbalances, signs of wear or damage. Do not use, if repairs or adjustments are necessary, since installation failure or an incorrectly balanced automation may cause injury
- The packing materials of the product must be disposed of in compliance with local regulations
- There must be at least 0.4 m between the driven parts and any fixed elements
- The wording on the tubular motors can be covered after assembly
- Motor with removable power cable and dedicated connector: if the power cable is damaged, it must be replaced by the manufacturer or by the latter's technical assistance service, or by a similarly qualified person, in order to prevent any type of risk.
- · Be careful with moving shutters and keep away from them until they have lowered fully
- Do not activate the awning when maintenance activities such as window cleaning are being carried out nearby
- Disconnect the awning from the power supply when maintenance activities such as window cleaning are being carried out nearby. Warning for 'shades with automatic control'

#### INSTALLATION WARNINGS

- Prior to installing the drive motor, remove any unnecessary cables and disable any appliance not required for motorised operation
- Install the manoeuvring assembly for manual release at a height below 1.8 m
- NOTE: if removable, the manoeuvring assembly must be kept close to the door
- Make sure that the control devices are kept far from moving parts but nonetheless in a visible position.
   The manoeuvring assembly of a switch kept manually closed must be located in a position visible from the guided part but far from moving parts. It must be installed at a minimum height of 1.5 m
- The fixed control devices must be installed in a visible position
- For drive motors that allow for accessing unprotected moving parts once they have been installed, such parts must be installed 2.5 m above the floor or other surface form which they can be accessed

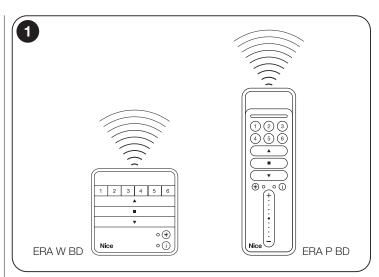


#### PRODUCT DESCRIPTION AND INTENDED USE

This product is a tubular motor for automating awnings, blind or shutter. **Do not use** it for any other purpose! The manufacturer declines all liability for damage resulting from improper use of the product or any other use than that specified in this manual.

The product has the following functional characteristics:

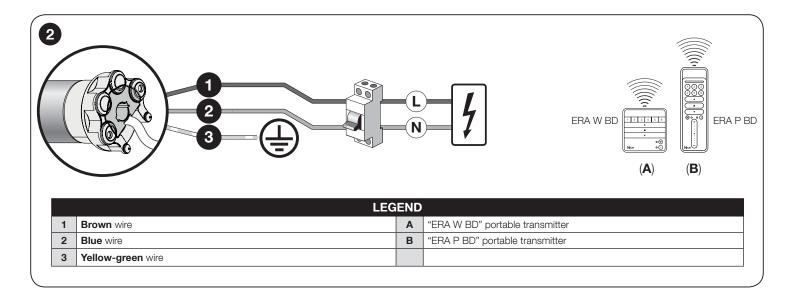
- it is mains powered (see the motor's nameplate ratings);
- it installs inside the winding roller; the part of the motor that protrudes from the roller (electronic head) mounts to the ceiling or wall with brackets (not included);
- it has a built-in radio receiver and control unit with encoder technology that electronically controls the movement and precision of the limit switches;
- can be configured for both ONE-WAY and TWO-WAY transmission. Nice's new two-way radio protocol enables communication in both directions between the transmitter and receiver, as does the mesh network which can connect to any Nice automation within radio range. The transmitter signal confirms that the control has been received correctly and allows the position of the automation to be controlled at all times. Wireless technology makes even initial programming simple and userfriendly.
- it is compatible with all Nice control electronics using the NRC radio system (transmitters and climate sensors, the latter can only be used if the motor is configured for operation in ONE-WAY mode);
- it can be controlled with a radio transmitter or cabled wall-mounted button panel (see fig. 1);
- it can move the awnings, blind or shutter up or down; stop it at the upper limit switch, the lower limit switch or various intermediate positions (up to 30 if the motor is configured for operating in ONE-WAY mode or up to 6 if it is configured for operating in TWO-WAY mode);
- is equipped with a "thermal protection device" which, in case of extended use, protect the motor against excessive overheating by limiting the motor speed to the minimum speed; in this way, the continuous usage time increases, allowing extended use (until the thermal protection device intervenes);
- it is available in several versions, each with a certain motor torque (power).



2 INSTALLATION OF THE MOTOR AND THE ACCESSORIES \_\_\_\_\_

## 2.1 - Preliminary checks before installation and limitations on use

- Check the condition of the product right after unpacking it.
- This product is available in several version, each with a specific motor torque. Each version is designed to drive roller shutters 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 roller shutter (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 lower than that needed to move your roller shutter.
- Check the diameter of the winding roller. This must be chosen according to the motor torque, as follows:
- for motors that are size "**M**" ( $\emptyset$  = 45 mm) and have a torque of up to 35 Nm (included, the minimum inside diameter of the winding roller must be 52 mm.
- Before automating a roller shutter, 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.



#### **2.2 - Assembling and installing the tubular motor** Caution! – Read the safety warnings before proceeding. Incorrect installation could cause severe physical injury.

To assemble and install the motor, refer to **fig. 3**. Moreover, consult the Nice product catalogue or go to www.niceforyou.com to choose the crown of the limit switch (**fig. 3-a**), the drag wheel (**fig. 3-b**), and the motor fastening bracket (**fig. 4-f**).

#### 2.3 - Installation of accessories (optional)

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. **Fig. 2** 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).

## **S** 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. 2):

| Cable | Colour       | Connection         |                         |
|-------|--------------|--------------------|-------------------------|
| 1     | Brown        | Power supply phase |                         |
| 2     | Blue         | Neutral            |                         |
| 3     | Yellow-green | Earth              | 220-230 VAC<br>50-60 Hz |

#### 3.1 - Connection of motor to electricity mains

Utilise cords 1, 2, 3 (fig. 2) 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).

#### 3.2 - Connection of accessories to motor

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

#### 4 PROGRAMMING AND ADJUSTMENTS

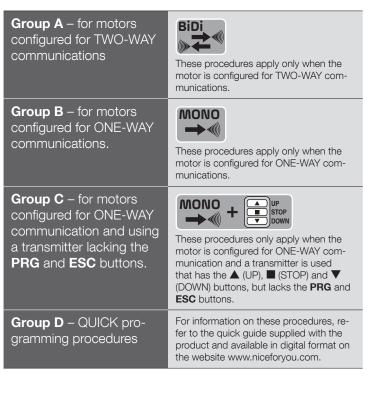
#### 4.1 - TWO-WAY and ONE-WAY operation

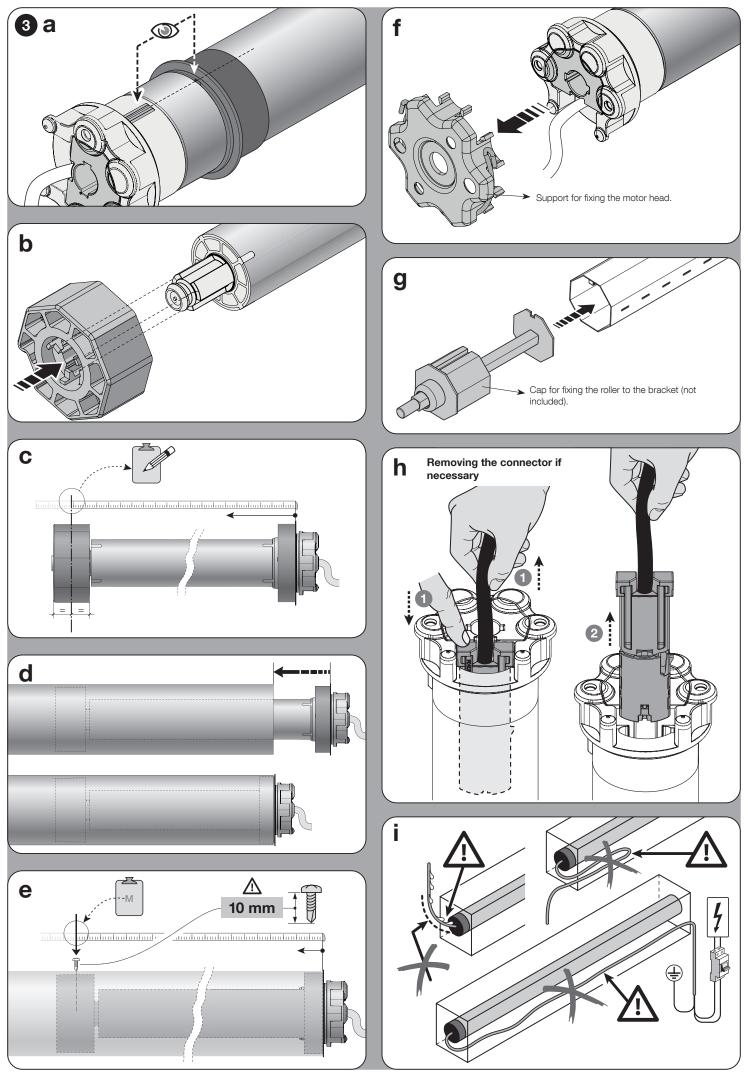
The motor can operate with both TWO-WAY and ONE-WAY transmission. The transmission mode is determined by the first transmitter paired with the motor (ONE-WAY or TWO-WAY).

WARNING: if the motor is new (and does not have any remote control memorised), at the start-up run one of the memorisation procedures for the first transmitter described at points B.1 motor configured for ONE-WAY communication, A.1 motor configured for TWO-WAY communication, or C.1 motor configured for ONE-WAY communication and OLD generation transmitter lacking the PRG and ESC buttons. In this way, the motor will be configured in the TWO-WAY mode (and thus will be able to accept all two-way transmitters) or ONE-WAY mode (and thus will be able to interact only with one-way transmitters), depending on which transmitter is memorised first.

#### 4.2 - Groups of programming and adjustment procedures

There are 4 groups of programming and adjustment procedures:





## 4.3 - Transmitter to be used for programming procedures

- Procedures that can only be completed with a Nice "ERA P" or "ERA W" transmitter having the PRG and ESC keys, or with transmitters equipped with a STOP key.
- All the programming procedures must be completed by selecting a single channel on the transmitter.
- The programming procedure must be performed exclusively with a transmitter memorised in "Mode I" (see procedure **B.1 A.1 D.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.

#### 4.3.1 - Report messages sent by the motor

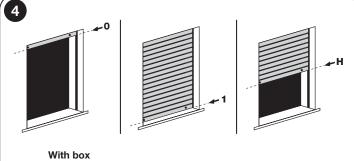
The motor repeats the report message on the <u>status of the installation</u> by performing some brief movements <u>when a movement is commanded</u>. To understand the significance of these movements read **Table A**.

| TABLE A – Movement signals |                               |  |  |
|----------------------------|-------------------------------|--|--|
| No. of MOVEMENTS           | Meaning                       |  |  |
| 0 movements (START & STOP) | = 2 limit switches programmed |  |  |
| 1 movement (START & STOP)  | = 1 limit switch programmed   |  |  |
| 2 movements (START & STOP) | = no limit switch programmed  |  |  |

## 4.4 - Positions in which the roller shutter stops automatically

The electronic system that controls the roller shutter's movement at all times can automatically stop the movement when the roller shutter reaches a certain position programmed by the installer. The programmable positions are (**fig. 4**):

- position "0" = UPPER (fully wound roller shutter);
- position "1" = LOWER (fully unwound roller shutter);
- position "H" = INTERMEDIATE (partially open roller shutter).



(the Up limit switch position will be determined by the point where the roller shutter strikes the box).

When the limit switches are not programmed yet, the roller shutter 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, <u>briefly pressing the appropriate key</u> will start the roller shutter and it will stop moving automatically as soon as the roller shutter 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 roller shutter (see the summary in the table).

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

- If you would like to adjust them with an <u>alternative procedure</u> different from the one used previously, you must FIRST delete the heights by following procedure B.11, A.10 or C.4.
- If you wish to adjust the <u>same procedure</u> 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 ( $\blacktriangle$ ) and shutter lowering key ( $\blacktriangledown$ ) 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  $\blacktriangle$  key, the roller shutter moves down instead of up, or vice versa).

#### 4.5 - General warnings

- The limit switch must be adjusted after installing the motor in the roller shutter and connecting it to the power supply.
- Comply strictly with 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 6 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 by the installer. <u>Count these movements</u> regardless of their direction. The movements are indicated in the procedures with a number followed by the symbol <u>A</u>.

## 4.6 - Important warnings for memorising the radio transmitters

- To select transmitter compatible with the motor's receiver, refer to the "Nice Screen" catalogue, which is also available on www.niceforyou.com.
- When the motor's memory does not contain any transmitter, to memorise the FIRST transmitter, perform the "Communication mode configuration procedure (ONE-WAY or TWO-WAY)" and subsequently use only one of the following procedures: B.1 (motor configured as ONE-WAY); A.1 (motor configured as TWO-WAY); C.1 (motor configured as ONE-WAY and OLD generation transmitter lacking the PRG and ESC keys). If instead one or more transmitters use one of following procedures only: B.7 (motor configured as ONE-WAY); A.7 (motor configured as TWO-WAY); C.2 (motor configured as ONE-WAY); A.7 (motor configured as TWO-WAY); C.2 (motor configured as ONE-WAY); A.7 (motor configured as TWO-WAY); C.2 (motor configured as ONE-WAY); A.7 (motor configured as TWO-WAY); C.2 (motor configured as ONE-WAY); A.7 (motor configured as TWO-WAY); C.2 (motor configured as ONE-WAY); A.7 (motor configured as TWO-WAY); C.2 (motor configured as ONE-WAY); A.7 (motor configured as TWO-WAY); C.2 (motor configured as ONE-WAY); A.7 (motor configured as TWO-WAY); C.2 (motor configured as ONE-WAY); A.7 (motor configured as TWO-WAY); C.2 (motor configured as ONE-WAY); A.7 (motor configured as TWO-WAY); C.2 (motor configured as ONE-WAY); A.7 (motor configured as TWO-WAY); C.2 (motor configured as ONE-WAY); A.7 (motor configured as ONE-WAY); C.2 (motor configured as

#### 4.6.1 - Two procedures to memorise the keys of a transmitter

There are two categories of transmitter memorisation procedures:

A - Procedures which memorise the buttons in "Mode I" ("Standard mode")

They are procedures B.1 - B.7.1 (motor configured as ONE-WAY); A.1 - A.7 (motor configured as TWO-WAY); C.1 - C.2.1 (motor configured as ONE-WAY and OLD generation transmitter lacking the PRG and ESC keys). These allow you to memorise all buttons at the same time, so that each button corresponds to a basic motor command in a standard fashion.

#### B - Procedures which memorise the buttons in "Mode II" ("Custom mode", only applicable when the motor is configured for ONE-WAY communications

These are procedures B.7.2, A.7 and C.2.2. These allow you to <u>memorise</u> individual buttons and map them to any of the commands given in the motor's "<u>list of commands</u>" (this list is given in each procedure). The button and the command are selected by the installer, as required by the installation.

# 4.6.2 - Number of transmitters that can be memorised (only applicable when the motor is configured for ONE-WAY communications)

You can memorise <u>30 transmitters</u>, if these are all memorised in "Mode I", or you can memorise <u>30 single commands (keys)</u> if they are all memorised in "Mode II". The two modes can coexist up to a maximum limit of 30 memorised units.

# 4.6.3 - Number of transmitters that can be memorised (only applicable when the motor is configured for TWO-WAY communications)

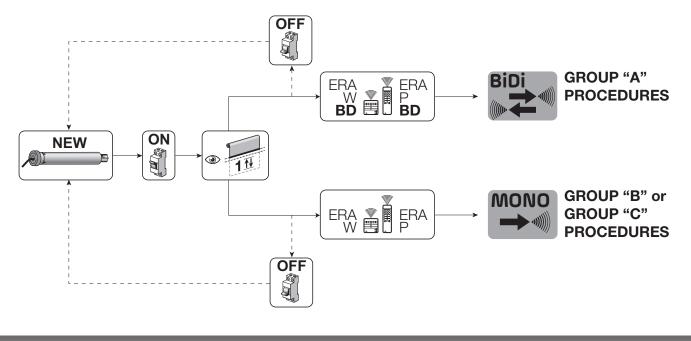
You can memorise 30 transmitters.

#### **GENERAL WARNINGS RELATING TO THE PROCEDURES**

- Before starting any programming, move the roller shutter to an intermediate position, away from the Up and Down limit switches.
- When the motor is powered up, if it makes **2 movements** this means that: <u>at least one transmitter has been memorised</u> <u>and no limit switch has been programmed</u>; if, on the other hand, it makes **1 movement** this means that: <u>no transmitter</u>
- has been memorised.
  When running a procedure, you can abort the procedure at any time by pressing ESC (on the back of the transmitter).
- To change the motor's configuration (from ONE-WAY to TWO-WAY and inversely), it is necessary to perform the "TOTAL deletion of the memory" (B.11 motor configured for ONE-WAY communication, A.10 motor configured for TWO-WAY communication or C.4 motor configured for ONE-WAY communication and OLD generation transmitter, lacking the PRG and ESC buttons) and then switch the motor off and on again.

WARNING: if the motor is new (and does not have any remote control memorised), at the start-up run one of the memorisation procedures for the first transmitter described at points B.1 motor configured for ONE-WAY communication, A.1 motor configured for TWO-WAY communication, or C.1 motor configured for ONE-WAY communication and OLD generation transmitter lacking the PRG and ESC buttons.

In this way, the motor will be configured in the **TWO-WAY** mode (and thus will be able to accept all two-way transmitters) or **ONE-WAY** mode (and thus will be able to interact only with one-way transmitters), depending on which transmitter is memorised first.





#### --- GROUP "A" PROCEDURES ---

for motors configured for TWO-WAY communications

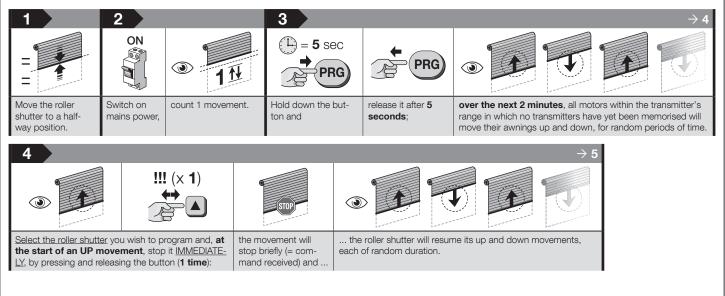
Procedures which can only be completed with a Nice transmitter with the ▲, ■, ▼, PRG, ESC keys (eg. "ERA P BD", "ERA W BD")

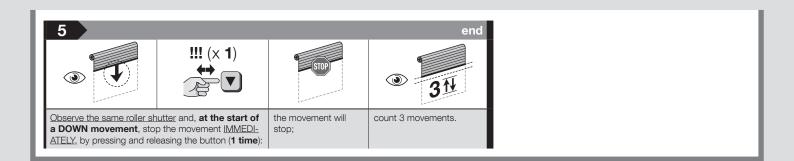
#### **GENERAL WARNINGS RELATING TO THE PROCEDURES**

- Before starting any programming, move the roller shutter to an intermediate position, away from the Up and Down limit switches.
- All the programming procedures must be completed by selecting a single channel on the transmitter.
- If the programming transmitter controls <u>multiple groups of screen motors</u>, before sending a <u>command requested by</u> <u>the procedure</u>, select the group to which the motor being programmed belongs.
- When the motor is powered up, if it makes **2 movements** this means that: <u>at least one transmitter has been memorised</u> <u>and no limit switch has been programmed</u>; if, on the other hand, it makes **1 movement** this means that: <u>no transmitter</u> <u>has been memorised</u>.
- When running a procedure, you can abort the procedure at any time by pressing **ESC** (on the back of the transmitter).
- When the Up and Down limit switches are not programmed, the roller shutter can only be commanded in hold-to-run mode - i.e. you must hold the button down until the roller shutter reaches the desired position. The movement stops when you release the button in any position.
- When the Up and Down limit switches have been programmed, the roller shutter can be controlled by simply pressing and releasing the buttons. Doing so starts the movement, which is stopped automatically by the system when the roller shutter reaches the programmed position.
- <u>All procedures require you to use a transmitter memorised in "Mode I</u>" (e.g., memorised with procedure A.1 or with procedure A.7).
- The "deletion carried out with a non-memorised transmitter" procedure does not appear in this section as, for motors configured in TWO-WAY communication mode, it is always possible to access it by completing the "Memorising the FIRST TRANSMITTER A.1" procedure.
- To change the motor's configuration (from ONE-WAY to TWO-WAY and inversely), it is necessary to perform the "TO-TAL deletion of the memory" procedure (B.11 motor configured for ONE-WAY communication, A.10 motor configured for TWO-WAY communication or C.4 motor configured for ONE-WAY communication and OLD generation transmitter, lacking the PRG and ESC buttons) and then switch the motor off and on again.

#### A.1 - Memorising the <u>FIRST TRANSMITTER</u> (in "Mode I") Bining

- To memorise further transmitters, use the procedure described under section B.7 (motor configured for ONE-WAY communication), A.7 (motor configured for TWO-WAY communication) or C.2 (motor configured for ONE-WAY communication and OLD generation transmitter lacking the PRG and ESC keys).
- If all transmitters memorised in the motor are deleted, the first transmitter you memorise thereafter must be memorised with this procedure.
- If the installation has multiple motors, the procedure must be repeated for each motor separately.
- On completing this procedure, button  $\blacktriangle$  will <u>Raise</u> the roller shutter, button  $\blacktriangledown$  <u>Lower</u> it, and button  $\blacksquare$  <u>Stop</u> the movement.
- If within the transmitter's range there are multiple powered up motors, to memorise the <u>first transmitter</u> in any one of them, <u>it is not necessary to disconnect power</u> to all other motors; simply proceed as follows.



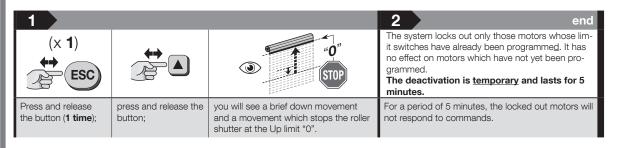




#### NOTES AND WARNINGS

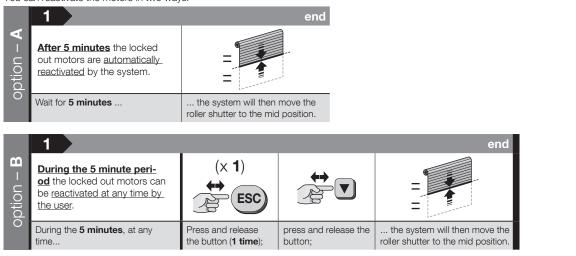
• This procedure temporarily deactivates (for 5 minutes) only motors whose up and down limit switches have already been programmed.

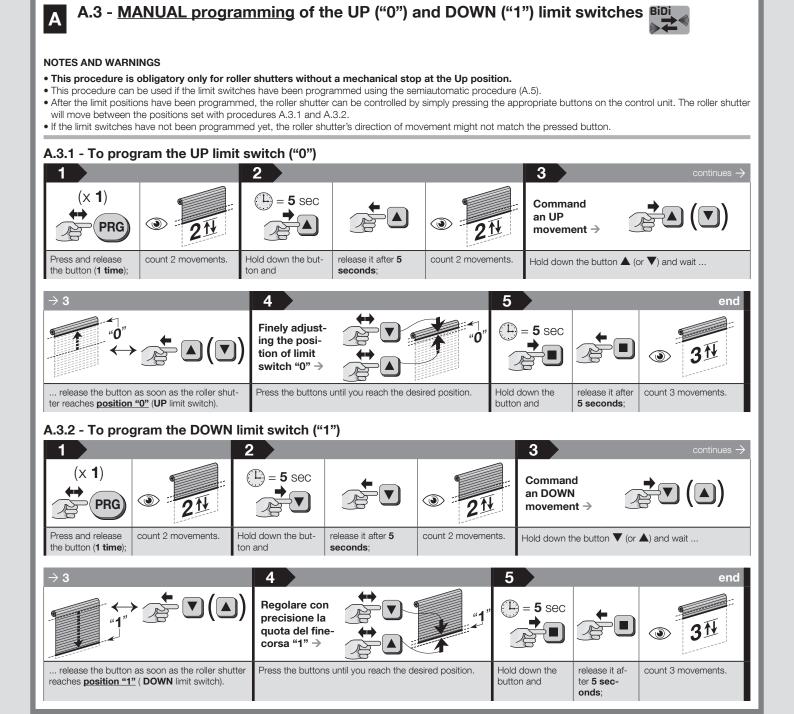
#### A.2.1 - To temporarily deactivate motors you do not wish to program



#### A.2.2 - To reactivate temporarily locked out motors

You can reactivate the motors in two ways:



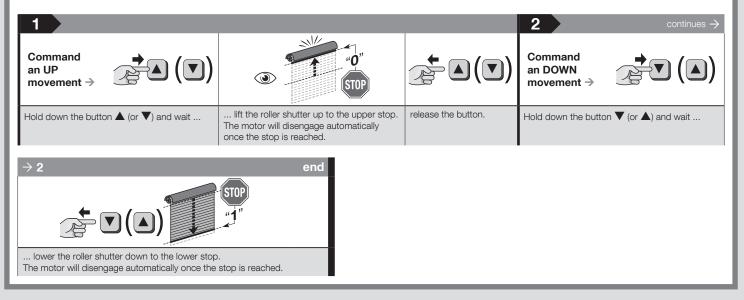


### A.4 - AUTOMATIC Programming of the UP ("0") and DOWN ("1") limit switches

NOTES AND WARNINGS

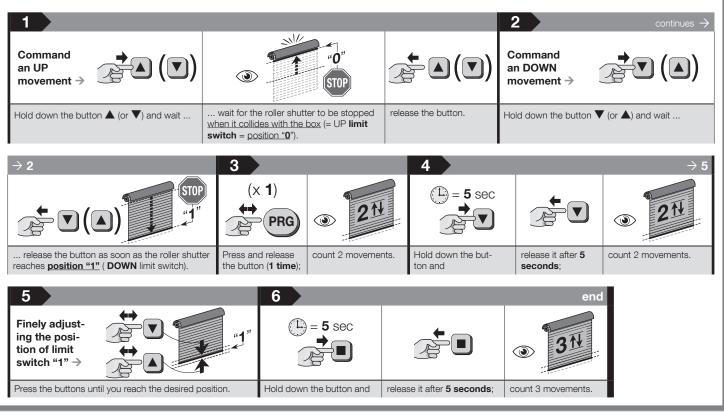
Α

- Use this procedure only for roller shutters equipped with mechanical locking devices.
- Programme the UP limit switch (0) FIRST.
- The down limit switch (1) is <u>NOT</u> memorised if it is within 120° with respect to the UP limit switch (0).
- If the limit switches have not been programmed yet, the roller shutter's direction of movement might not match the pressed button.
- After programming the limit switches, the ▲ key will command the **Up** manoeuvre and the ▼ switch will command the **Down** manoeuvre. The movement of the roller shutter will be limited by limit switches (Upper "0" and Lower "1") programmed by the installer.



## A.5 - <u>SEMIAUTOMATIC programming</u> of the UP ("0") and DOWN ("1") limit switches

- Use this procedure solely for roller shutters with mechanical Up "0" limit switch stop.
- If, previously, the limit switches were programmed with the "Manual (A.3)" programming, to complete this procedure before proceeding with the "Total or partial deletion of the memory [B.11.1 (motor configured for ONE-WAY communication), A.10.1 (motor configured for TWO-WAY communication) or C.4.1 (motor configured for ONE-WAY communication and OLD generation transmitter lacking the PRG and ESC keys) option 'A' or 'D']".
- If the limit switches have not been programmed yet, the roller shutter's direction of movement might not match the pressed button.
- After the limit positions have been programmed, the roller shutter can be controlled by simply pressing the appropriate buttons on the control unit. The Up movement will be limited when the roller shutter impacts against the mechanical lock (box) in the Upper limit switch "0". With each impact, the height of this limit switch will be automatically updated by the "Automatic limit switch update" function (paragraph 5.4). Conversely, the Down movement will be limited by the Lower limit switch "1" (limit switch set by the installer at a desired point).



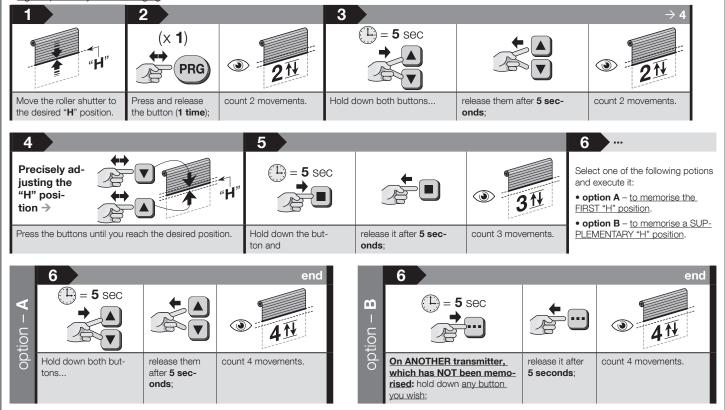
#### A.6 - Programming an INTERMEDIATE POSITION (position "H")



#### NOTES AND WARNINGS

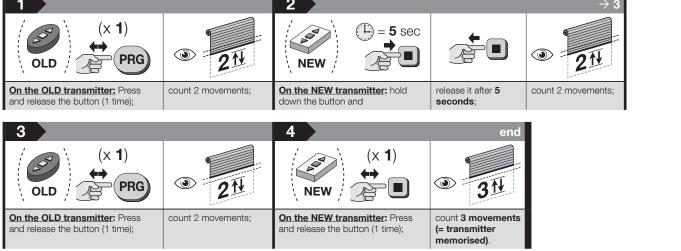
Α

- This procedure memorises an intermediate position (position "H") between the Up ("0") and Down ("1") limit switch positions. When the automation is being used, after giving the **intermediate position** command, the system will automatically stop the roller shutter at the programmed "H" position.
- Up to 30 "H" positions can be memorised if the motor is configured to operate in ONE-WAY mode, or up to 6 "H" positions if the motor is configured to operate in TWO-WAY mode, in any desired position, provided that they are within the space delimited by the two limit switches. These positions can <u>only be programmed after</u> the limit switches. These positions can <u>only be programmed after</u>
- the limit switch positions. Repeat this procedure for each position you wish to memorise. • The first "H" position must be programmed using the buttons ▲+♥, on the transmitter used to run the procedure itself. However, each subsequent position "H" must be programmed using a button on another non-memorised transmitter.
- To change an existing "H" position, move the awning to the desired height and run this procedure; in step 06, however, press the button associated with the existing "H" position you are changing.



A.7 - Memorising ANOTHER TRANSMITTER (second, third, etc.)

- The motor configured to operate in TWO-WAY mode can memorise up to 16 transmitters.
- To run procedures A.7 you must have a **new transmitter** to memorise and an **old** previously memorised transmitter. The two transmitters must have the "PRG" and "ESC" buttons (like "ERA P" and "ERA W" transmitters).
- Procedures A.7 memorise all the **new** transmitter's buttons in "Mode I", with the same configuration as the **old** transmitter (for details about "Mode I" see par. 4.6.1).



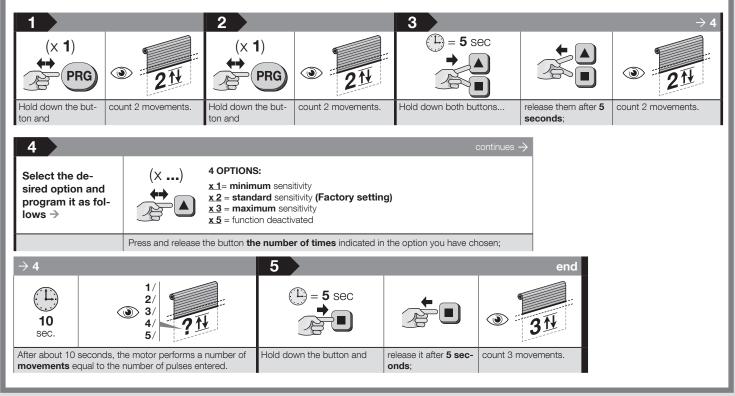
#### A.8 - Adjusting the motor's sensitivity to obstacles

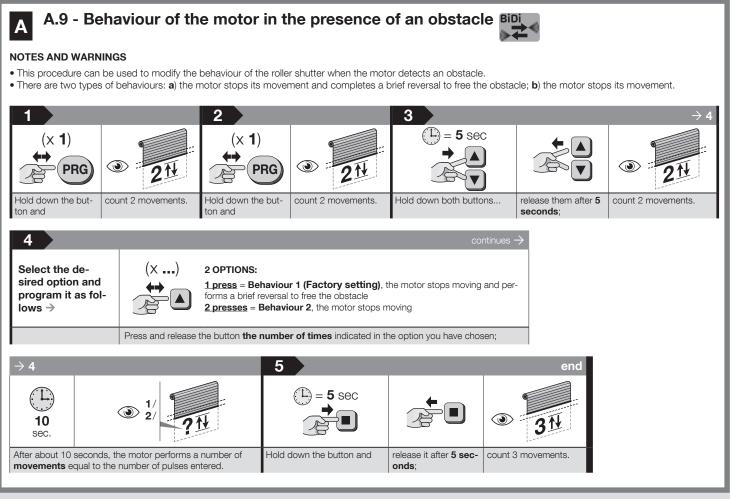


#### NOTES AND WARNINGS

- This function prevents the roller shutter from remaining excessively taut 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.
- The maximum allowed sensitivity level in order to have a reliable application depends on the type, weight and dimensions of the roller shutter.
- After changing the setting, the automation must complete AT LEAST three complete cycles in order to apply the chosen sensitivity level.

#### • Warning! - This function is active with the factory setting but is not applicable if the limit switches are programmed with the manual procedure A.3.



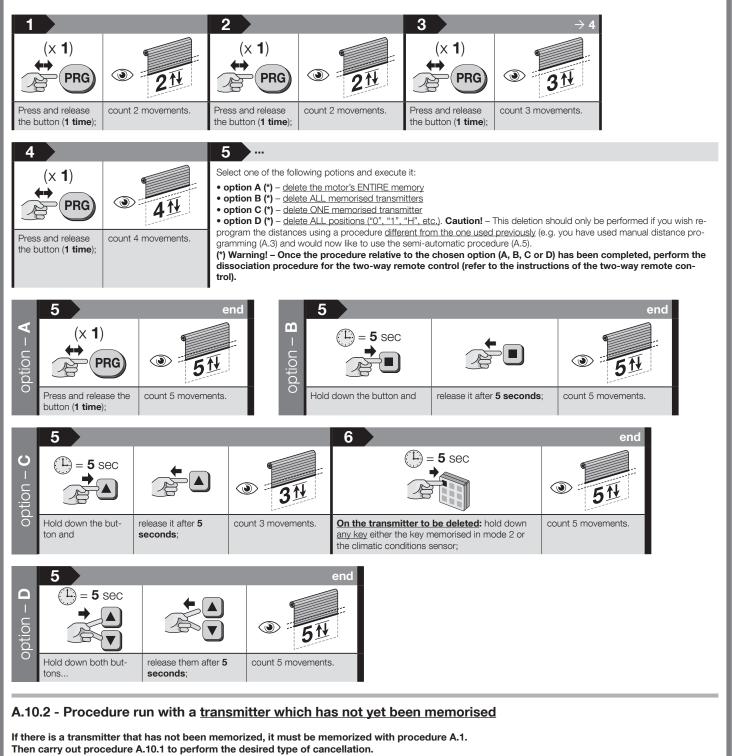


### A.10 - TOTAL or PARTIAL deletion of memory



- In order to carry out the following deletion procedures, the transmitter must be memorised in mode I.
- To change the motor's configuration (from TWO-WAY to ONE-WAY), after completing the "FULL deletion of the memory" procedure, it is necessary to switch the motor off and then on again.
- Once the transmitter has been deleted from the motor's memory, it is necessary to delete from the transmitter's memory the motor that is no longer associated, to prevent "no motor" error messages from appearing on the transmitter (refer to the transmitter manual).

#### A.10.1 - Procedure run with a memorised transmitter



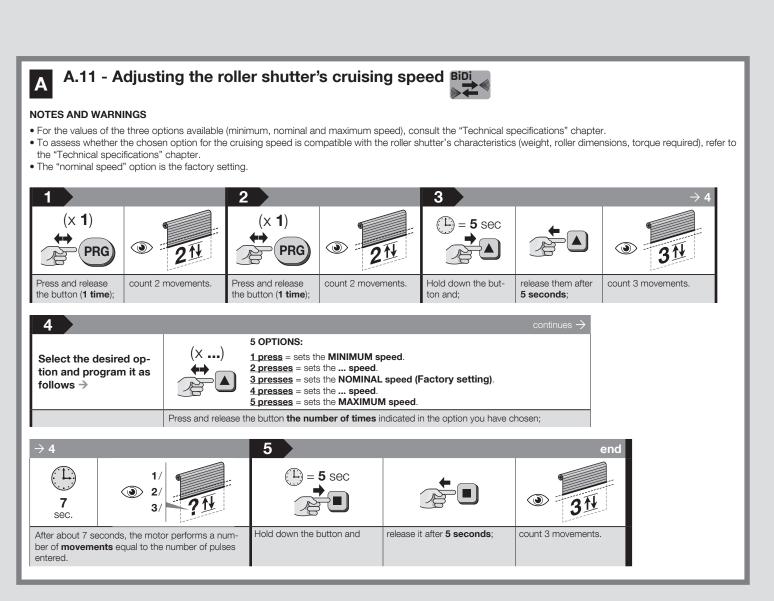
#### GENERAL INFORMATION ABOUT PROCEDURES "A.11", "A.12", "A.13"

The "Roller shutter cruising speed (procedure A.11)", "Total manoeuvre duration (procedure A.12)" and "Adjustment of the <u>Soft-Start / Soft-Stop movement (procedure A.13)</u>" functions can be used to fully customise every aspect of the roller shutter's movement, including alignments and other effects that are useful especially when multiple roller shutters are installed close to one another, with different sizes and rollers of different diameters, or for making the shutter's movement more silent.

- The "Total manoeuvre duration (procedure A.12)" and the "Roller shutter cruising speed (procedure A.11)" functions are interdependent: the last function set determines the actual cruising speed of the roller shutter.
- After setting the desired **manoeuvre time** (procedure A.12), the system automatically adjusts the **cruising speed** (while also accounting for the set **acceleration/deceleration**) to ensure that the manoeuvre lasts exactly the set time.

If the **Soft-Start / Soft-Stop movement** (procedure A.13) is then modified, or the **limit switch positions** (procedure A.3 / A.5), the **manoeuvre duration** remains unchanged and the system adjusts the roller shutter's **cruising speed** accordingly.

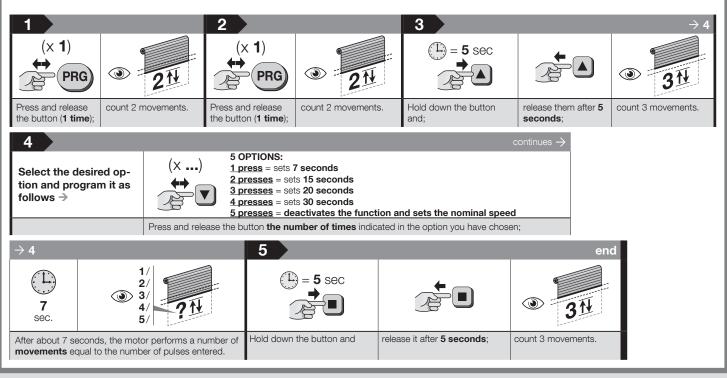
- When setting the desired **manoeuvre duration** (procedure A.12), if the resulting **cruising speed** is outside the allowed range (see the values given in "Technical specifications"), the motor will signal the error by moving 6 times at the end of the procedures (A.3 / A.5 / A.13), and will automatically restore the **cruising speed** to its nominal value.
- After setting the cruising speed with procedure A.12, changing the limit switch positions (procedure A.3 / A.5) or the Soft-Start / Soft-Stop movement (procedure A.13) may set the cruising speed outside the allowed range (given in the "Technical specifications"). In such cases, the motor will signal the error by moving 6 times at the end of the procedures (A.3 / A.5 / A.13) and will automatically restore the cruising speed to its nominal value.

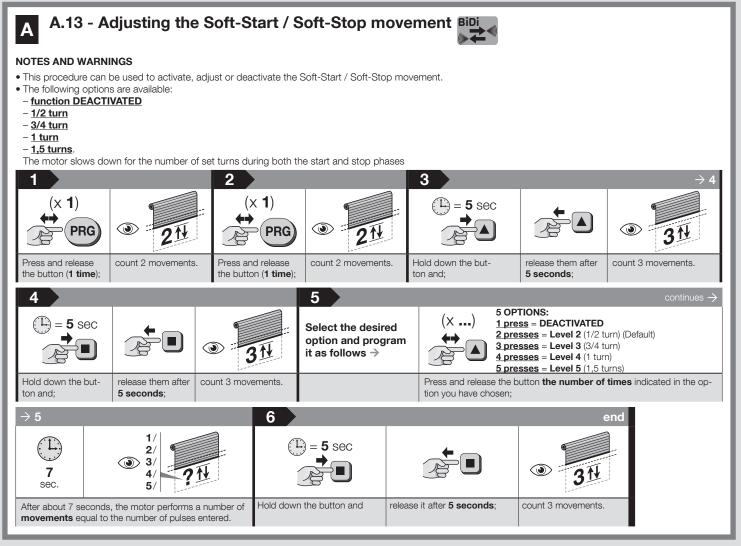


#### A.12 - Adjusting the total manoeuvre duration



- This adjustment can only be done if the limit switches ("0" and "1") have already been programmed.
- The value set with this procedure, together with the "acceleration/deceleration" setting (procedure A.13) gives the <u>cruising speed</u>. To assess whether the <u>resulting</u>
- cruising speed is compatible with the roller shutter's characteristics (weight, roller dimensions, torque required, etc.), consult the "Technical specifications" chapter. • The product leaves the factory with the function disabled.







#### --- GROUP "B" PROCEDURES --

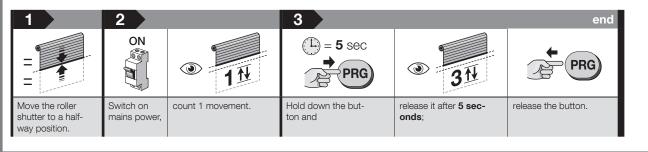
for motors configured for ONE-WAY communications procedures which can only be completed with a Nice "ERA P" or "ERA W" transmitter with the ▲, ■, ▼, PRG, ESC keys

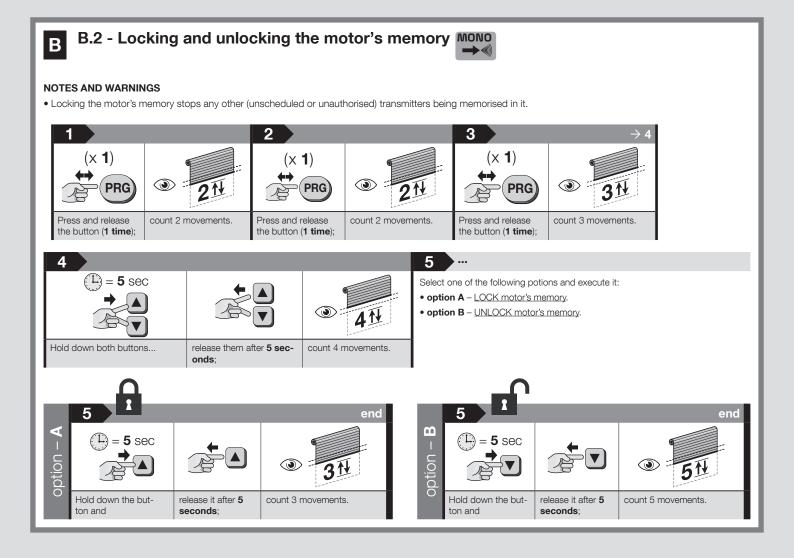
#### **GENERAL WARNINGS RELATING TO THE PROCEDURES**

- Before starting any programming, move the roller shutter to an intermediate position, away from the Up and Down limit switches.
- All the programming procedures must be completed by selecting a single channel on the transmitter.
- If the programming transmitter controls <u>multiple groups of screen motors</u>, before sending a <u>command requested by</u> <u>the procedure</u>, select the group to which the motor being programmed belongs.
- When the motor is powered up, if it makes **2 movements** this means that: <u>at least one transmitter has been memorised</u> <u>and no limit switch has been programmed</u>; if, on the other hand, it makes **1 movement** this means that: <u>no transmitter</u> <u>has been memorised</u>.
- When running a procedure, you can abort the procedure at any time by pressing **ESC** (on the back of the transmitter).
- When the Up and Down limit switches are not programmed, the roller shutter can only be commanded in hold-to-run mode - i.e. you must hold the button down until the roller shutter reaches the desired position. The movement stops when you release the button in any position.
- When the Up and Down limit switches have been programmed, the roller shutter can be controlled by simply pressing and releasing the buttons. Doing so starts the movement, which is stopped automatically by the system when the roller shutter reaches the programmed position.
- To perform <u>all</u> the procedures, it is necessary to use a <u>transmitter memorised in "Mode I</u>" (for example, the one memorised with procedure B.1 motor configured for ONE-WAY communication, A.1 motor configured for TWO-WAY communication or C.1 motor configured for ONE-WAY communication and OLD generation transmitter lacking the PRG and ESC keys).
- To change the motor's configuration (from ONE-WAY to TWO-WAY and inversely), it is necessary to perform the "TOTAL deletion of the memory" procedure (B.11 motor configured for ONE-WAY communication, A.10 motor configured for TWO-WAY communication or C.4 motor configured for ONE-WAY communication and OLD generation transmitter, lacking the PRG and ESC buttons) and then switch the motor off and on again.

#### B.1 - Memorising the <u>FIRST TRANSMITTER</u> (in "Mode I") MONO

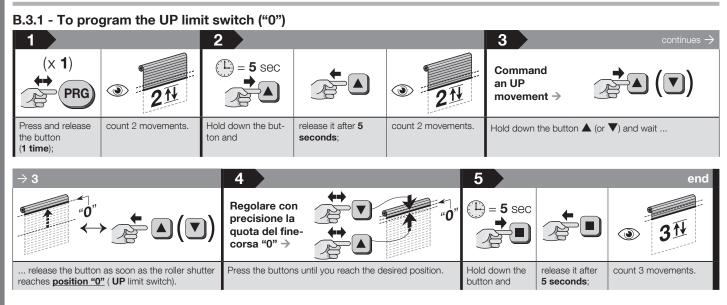
- This procedure must be used <u>only for memorising the FIRST TRANSMITTER</u>. If the motor does not perform the procedure, it means that one or more transmitters are already memorised; therefore, to memorise further transmitters, m use the procedure described under section B.7 (motor configured for ONE-WAY communication), A.7 (motor configured for TWO-WAY communication) or C.2 (motor configured for ONE-WAY communication and OLD generation transmitter lacking the PRG and ESC keys).
- If all transmitters memorised in the motor are deleted, the first transmitter you memorise thereafter must be memorised with this procedure.
- If the installation has multiple motors, the procedure must be repeated for each motor separately.
- Once the <u>first transmitter</u> has been memorised, the raising and lowering direction of the roller shutter will not yet be associated with the ▲ and ▼ buttons of the transmitter. This combination will occur automatically when adjusting the up ("0") and down ("1") limit switches (see procedure B.3); moreover, the roller shutter will only move in "hold-to-run" mode during the time in which the limit switches have not yet been adjusted.
- If within the transmitter's range there are multiple powered up motors, to memorise the first transmitter in any one of them, it is necessary to disconnect the power supply to all other motors and proceed as follows:

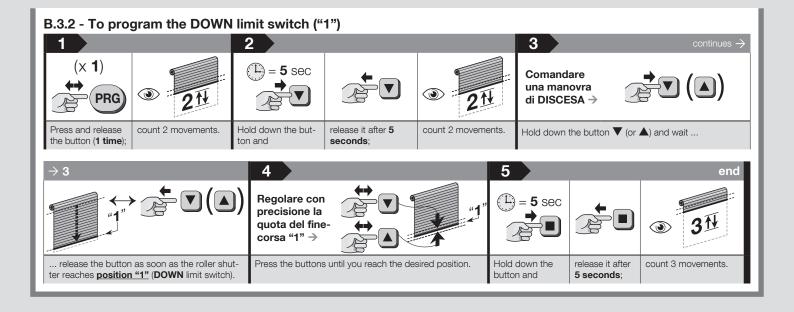


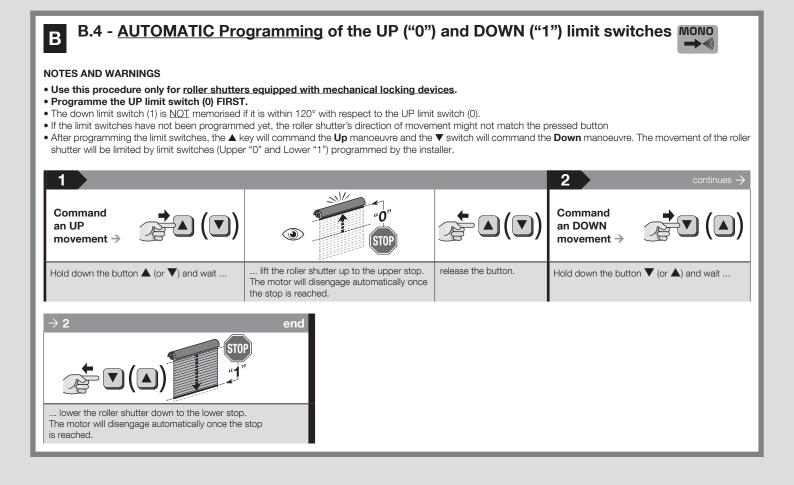


## B.3 - MANUAL programming of the UP ("0") and DOWN ("1") limit switches

- This procedure is obligatory only for roller shutters without a mechanical stop at the Up position.
- This procedure can be used if the limit switches have been programmed using the semiautomatic procedure (B.5).
- After the limit positions have been programmed, the roller shutter can be controlled by simply pressing the appropriate buttons on the control unit. The roller shutter will move between the positions set with procedures B.3.1 and B.3.2.
- If the limit switches have not been programmed yet, the roller shutter's direction of movement might not match the pressed button





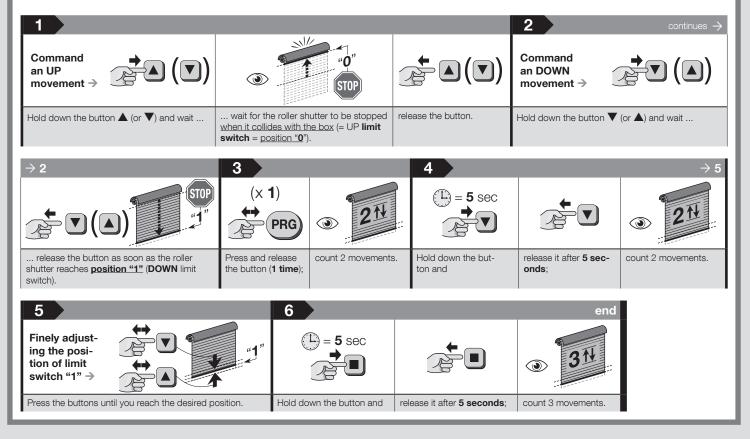


## B.5 - <u>SEMIAUTOMATIC programming</u> of the UP ("0") and DOWN ("1") limit switches

#### NOTES AND WARNINGS

Β

- Use this procedure solely for roller shutters with mechanical Up "0" limit switch stop.
- If, previously, the limit switches were programmed with the "Manual (B.3)" programming, to complete this procedure before proceeding with the "Total or partial deletion of the memory [B.11.1 (motor configured for ONE-WAY communication), A.10.1 (motor configured for TWO-WAY communication) or C.4.1 (motor configured for ONE-WAY communication and OLD generation transmitter lacking the PRG and ESC keys) option 'A' or 'D']".
- If the limit switches have not been programmed yet, the roller shutter's direction of movement might not match the pressed button.
- After the limit positions have been programmed, the roller shutter can be controlled by simply pressing the appropriate buttons on the control unit. The Up movement will be limited when the roller shutter impacts against the mechanical lock (box) in the Upper limit switch "0". With each impact, the height of this limit switch will be automatically updated by the "Automatic limit switch update" function (paragraph 5.4). Conversely, the Down movement will be limited by the Lower limit switch "1" (limit switch set by the installer at a desired point).



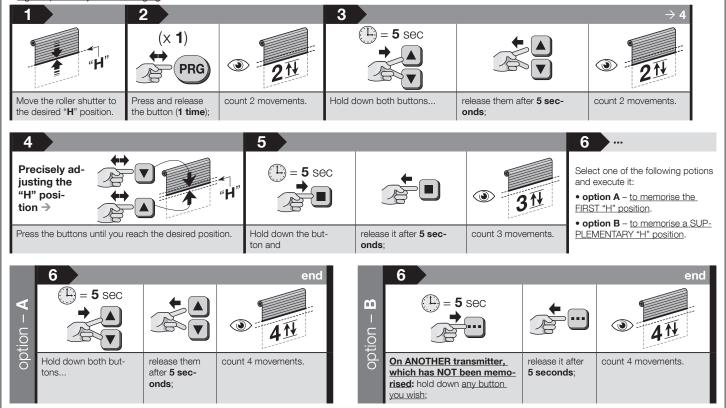
#### B.6 - Programming an INTERMEDIATE POSITION (position "H") MONO



#### NOTES AND WARNINGS

В

- This procedure memorises an intermediate position (position "H") between the Up ("0") and Down ("1") limit switch positions. When the automation is being used, after giving the intermediate position command, the system will automatically stop the roller shutter at the programmed "H" position.
- Up to 30 "H" positions can be memorised if the motor is configured to operate in ONE-WAY mode, or up to 6 "H" positions if the motor is configured to operate in TWO-WAY mode, in any desired position, provided that they are within the space delimited by the two limit switches. These positions can only be programmed after
- the limit switch positions. Repeat this procedure for each position you wish to memorise. The first "H" position must be programmed using the buttons ▲+♥, on the transmitter used to run the procedure itself. However, each subsequent position "H" must be programmed using a button on another non-memorised transmitter.
- To change an existing "H" position, move the awning to the desired height and run this procedure; in step 06, however, press the button associated with the existing "H" position you are changing.



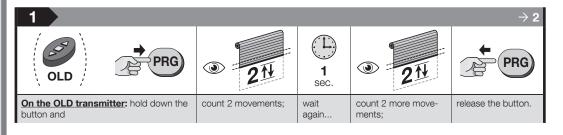
#### B.7 - Memorising ANOTHER TRANSMITTER (second, third, etc.) MONO В

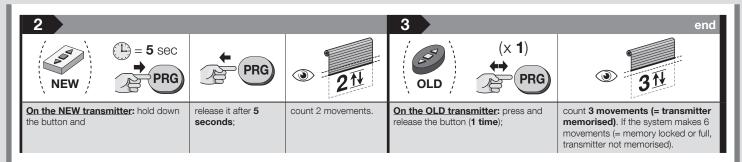
#### NOTES AND WARNINGS

- •The motor configured to operate in ONE-WAY mode can memorise up to 30 transmitters.
- To run procedure B.7.1, you must have a new transmitter to memorise and an old previously memorised transmitter. The two transmitters must have the "PRG" and "ESC" buttons (like "ERA P" and "ERA W" transmitters).
- To run procedure B.7.2 you must have a new transmitter to memorise, chosen from the "Nice Screen" catalogue, and an old previously memorised transmitter.

#### B.7.1 - To memorise the transmitter buttons in "Mode I" ("Standard mode")

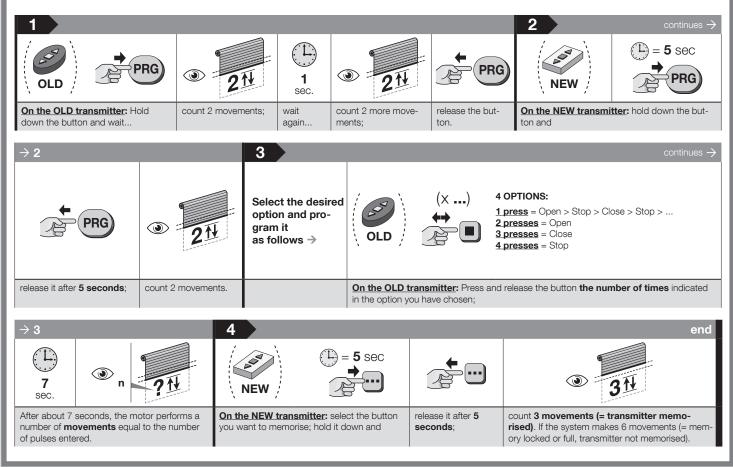
• Procedure B.7.1 memorise all the new transmitter's buttons in "Mode I", with the same configuration as the old transmitter (for details about "Mode I" see par. 4.6.1).

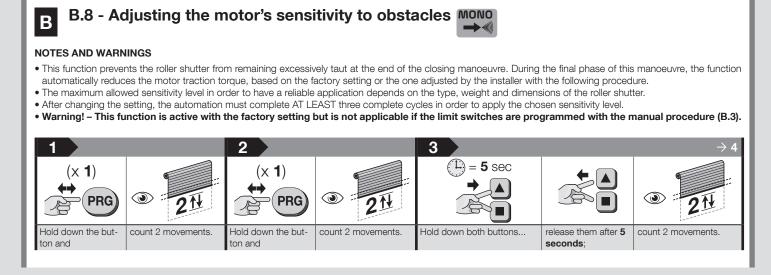


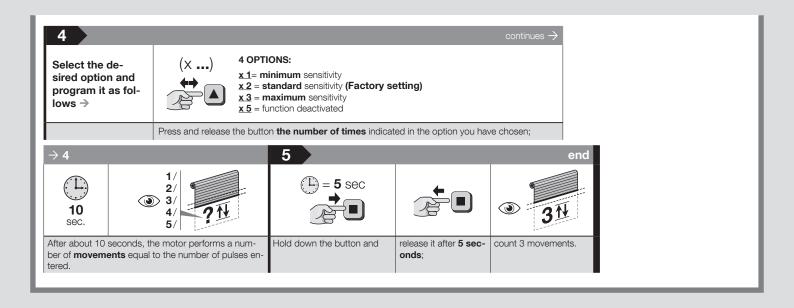


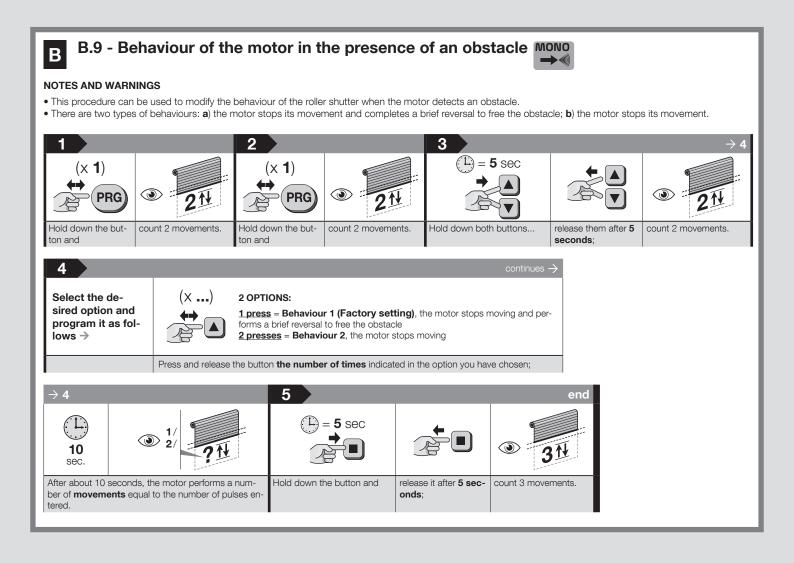
#### B.7.2 - To memorise the transmitter buttons in "Mode II" ("Custom mode")

- Procedure B.7.2 memorise a single button on the **new** transmitter in Mode II; i.e. they associate with the button (chosen by the installer) one of the commands in the motor's "list of commands" (for details on "Mode II" see section 4.6.1).
- Procedures B.7.2 memorise a single button. Repeat this operation to memorise another button.







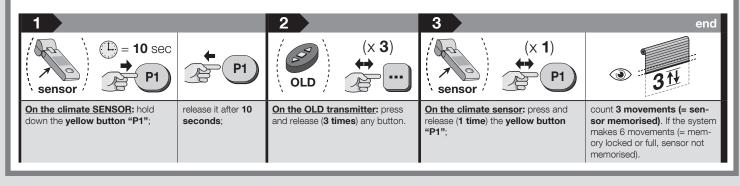


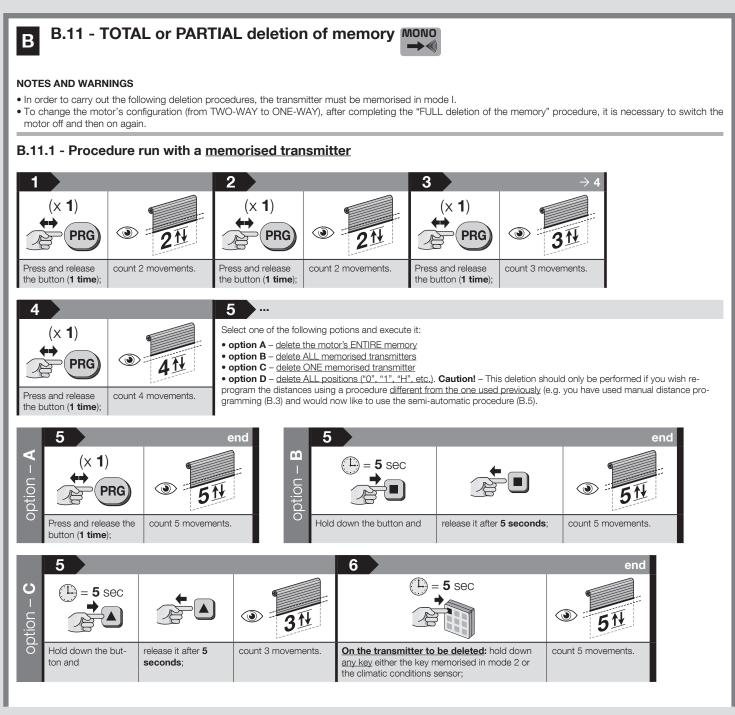
#### B.10 - Memorisation of a <u>climate sensor connected via radio</u> MONO

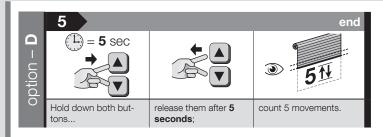
#### NOTES AND WARNINGS

Β

- To run this procedure you need the <u>climate sensor you want to memorise</u>, chosen from the "Nice Screen" catalogue, and an <u>old transmitter memorised in Mode I</u> (see par. 4.5.1).
- When performing the procedure, you can cancel the programming at any time by holding down and ▼ together for <u>4 seconds</u>. Alternatively, do not press any keys and wait 60 seconds for the motor to perform <u>6 movements</u>.



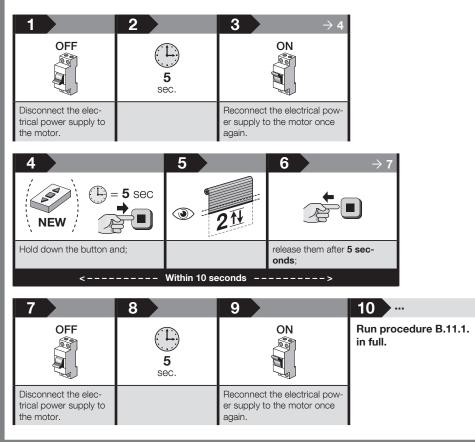




#### B.11.2 - Procedure run with a transmitter which has not yet been memorised

#### NOTES AND WARNINGS

• In order to carry out the following procedures, a transmitter with a PRG button should be used.



#### GENERAL INFORMATION ABOUT PROCEDURES "B.12", "B.13", "B.14"

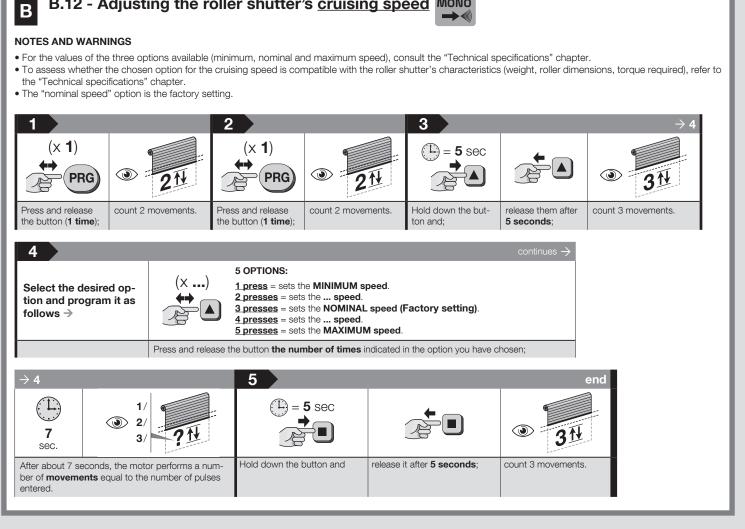
The "Roller shutter cruising speed (procedure B.12)", "Total manoeuvre duration (procedure B.13)" and "Adjustment of the Soft-Start / Soft-Stop movement (procedure B.14)" functions can be used to fully customise every aspect of the roller shutter's movement, including alignments and other effects that are useful especially when multiple roller shutters are installed close to one another, with different sizes and rollers of different diameters, or for making the shutter's movement more silent.

- The "Total manoeuvre duration (procedure B.13)" and the "Roller shutter cruising speed (procedure B.12)" functions are interdependent: the last function set determines the actual cruising speed of the roller shutter.
- After setting the desired manoeuvre time (procedure B.13), the system automatically adjusts the cruising speed (while also accounting for the set acceleration/deceleration) to ensure that the manoeuvre lasts exactly the set time.

If the Soft-Start / Soft-Stop movement (procedure B.14) is then modified, or the limit switch positions (procedure B.3 / B.5), the manoeuvre duration remains unchanged and the system adjusts the roller shutter's cruising speed accordingly.

- When setting the desired manoeuvre duration (procedure B.13), if the resulting cruising speed is outside the allowed range (see the values given in "Technical specifications"), the motor will signal the error by moving 6 times at the end of the procedures (B.3 / B.5 / B.14), and will automatically restore the **cruising speed** to its nominal value.
- After setting the cruising speed with procedure B.13, changing the limit switch positions (procedure B.3 / B.5) or the Soft-Start / Soft-Stop movement (procedure B.14) may set the cruising speed outside the allowed range (given in the "Technical specifications"). In such cases, the motor will signal the error by moving 6 times at the end of the procedures (B.3 / B.5 / B.14) and will automatically restore the cruising speed to its nominal value.

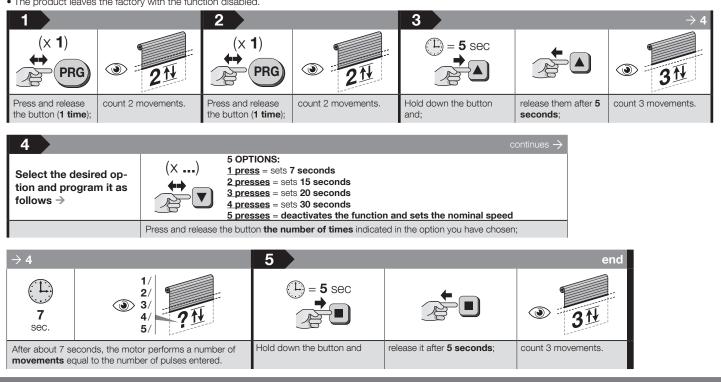
B.12 - Adjusting the roller shutter's cruising speed MONO

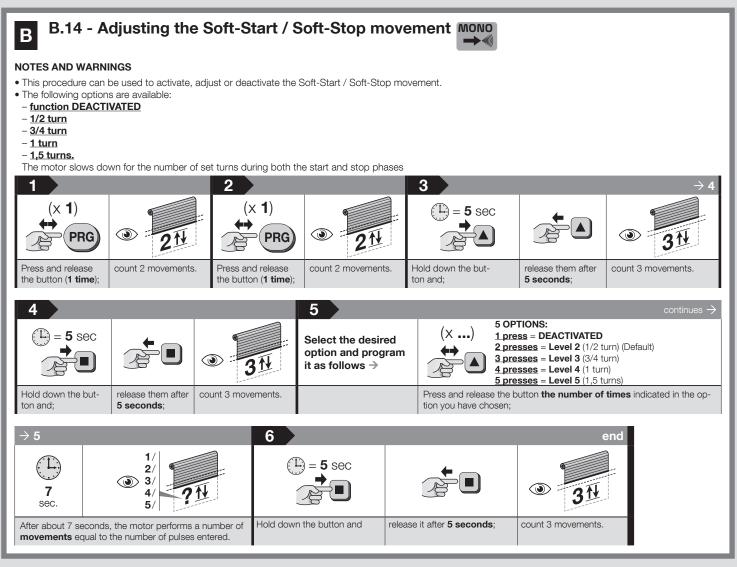


#### B.13 - Adjusting the total manoeuvre duration MONO В



- This adjustment can only be done if the limit switches ("0" and "1") have already been programmed.
- The value set with this procedure, together with the "acceleration/deceleration" setting (procedure B.14) gives the cruising speed. To assess whether the resulting cruising speed is compatible with the roller shutter's characteristics (weight, roller dimensions, torque required, etc.), consult the "Technical specifications" chapter. • The product leaves the factory with the function disabled.







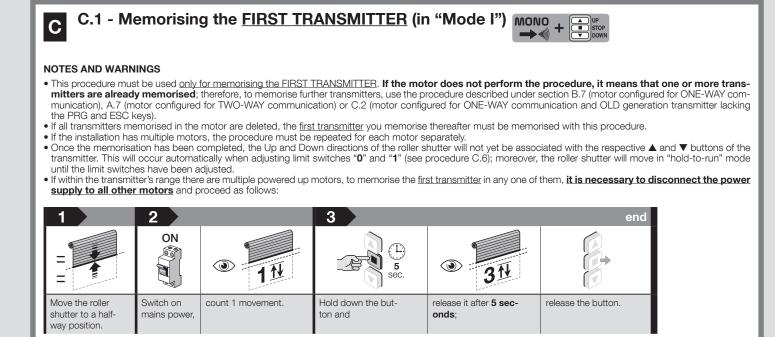
#### — GROUP "C" PROCEDURES —

for motors configured for ONE-WAY communication mode

feasible only with a Nice transmitter equipped with buttons  $\blacktriangle$ ,  $\blacksquare$ , and  $\triangledown$  alone and lacking the PRG and ESC buttons

#### **GENERAL WARNINGS RELATING TO THE PROCEDURES**

- Before starting any programming, move the awning to an intermediate position, away from the Up and Down limit switches.
- All the programming procedures must be completed by selecting a single channel on the transmitter.
- If the programming transmitter controls **multiple groups of screen motors**, before sending a <u>command requested by</u> <u>the procedure</u>, select the group to which the motor being programmed belongs.
- When the motor is powered up, if it makes **2 movements** this means that: <u>at least one transmitter has been memorised</u> <u>and no limit switch has been programmed</u>; if, on the other hand, it makes **1 movement** this means that: <u>no transmitter has been memorised</u>.
- When performing the procedure, you can cancel the programming at any time by holding down and ▼ together for 4 seconds.
- When the Up and Down limit switches are not programmed, the awning can only be commanded in hold-to-run mode i.e. you must hold the button down until the awning reaches the desired position. The movement stops when you release the button in any position.
- When the Up and Down limit switches have been programmed, the awning can be controlled by simply pressing and releasing the buttons. Doing so starts the movement, which is stopped automatically by the system when the awning reaches the programmed position.
- <u>All procedures require you to use a transmitter memorised in "Mode I</u>" (e.g., memorised with procedure C.1 or with procedure C.2.1).



### C.2 - Memorising ANOTHER TRANSMITTER (second, third, etc.)

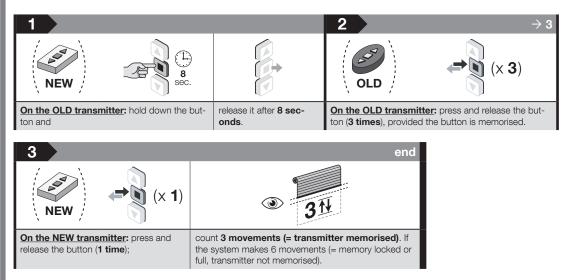
#### NOTES AND WARNINGS

С

- •The motor configured to operate in ONE-WAY mode can memorise up to 30 transmitters.
- To run procedure C.2.1, you must have a <u>new transmitter</u> to memorise and an <u>old previously memorised transmitter</u>. The two transmitters must have the "PRG" and "ESC" buttons (like "ERA P" and "ERA W" transmitters).
- To run procedure C.2.2 you must have a new transmitter to memorise, chosen from the "Nice Screen" catalogue , and an old previously memorised transmitter.

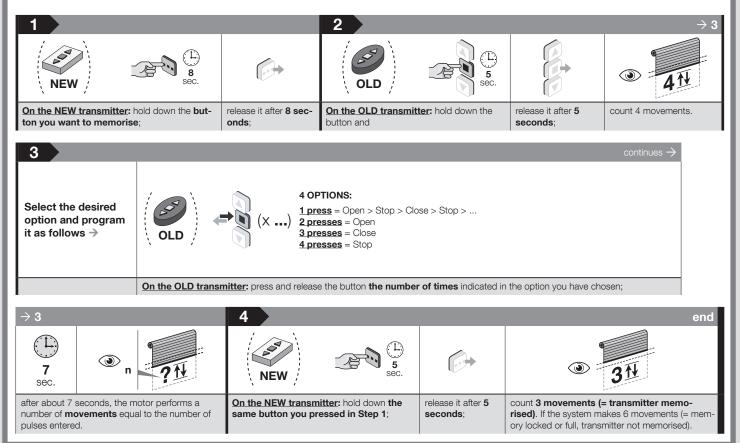
#### C.2.1 - To memorise the transmitter buttons in "Mode I" ("Standard mode")

• Procedure C.2.1 memorise all the new transmitter's buttons in "Mode I", with the same configuration as the old transmitter (for details about "Mode I" see par. 4.6.1).



#### C.2.2 - To memorise the transmitter buttons in "Mode II" ("Custom mode")

- Procedure C.2.2 memorise a single button on the **new** transmitter in Mode II; i.e. they associate with the button (chosen by the installer) one of the commands in the motor's "list of commands" (for details on "Mode II" see section 4.6.1).
- Procedures C.2.2 memorise <u>a single button</u>. Repeat this operation to memorise another button.
- When performing the procedure, you can cancel the programming at any time by holding down and ▼ together for <u>4 seconds</u>. Alternatively, do not press any keys and wait 60 seconds for the motor to perform <u>6 movements</u>.

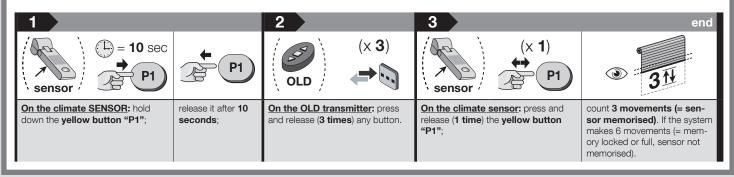


### C.3 - Memorisation of a <u>climate sensor connected via radio</u>



#### NOTES AND WARNINGS

- To run this procedure you need the <u>climate sensor you want to memorise</u>, chosen from the "Nice Screen" catalogue, and an <u>old transmitter memorised in Mode I</u> (see par. 4.6.1).
- When performing the procedure, you can cancel the programming at any time by holding down and ▼ together for <u>4 seconds</u>. Alternatively, do not press any keys and wait 60 seconds for the motor to perform <u>6 movements</u>.

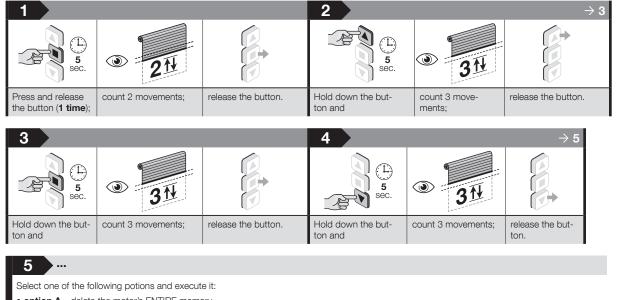




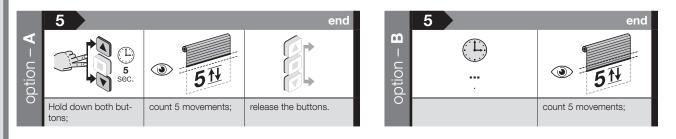
#### NOTES AND WARNINGS

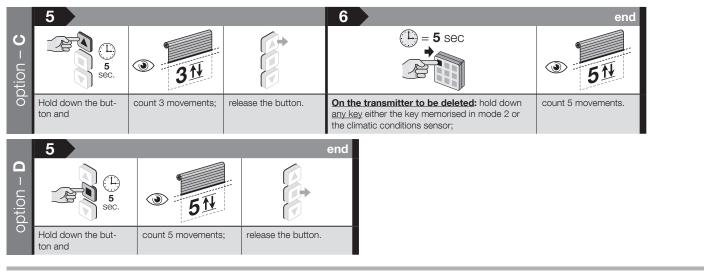
- In order to carry out the following deletion procedures, the transmitter must be memorised in mode I.
- To change the motor's configuration (from TWO-WAY to ONE-WAY), after completing the "FULL deletion of the memory" procedure, it is necessary to switch the motor off and then on again.
- When performing the procedure, you can cancel the programming at any time by pressing and holding the **I** and **V** buttons simultaneously for 4 seconds. Alternatively, do not press any button and wait 60 seconds for the motor to complete 6 movements.

#### C.4.1 - Procedure run with a memorised transmitter



- option A <u>delete the motor's ENTIRE memory</u>
- option B delete ALL memorised transmitters
- option C delete ONE memorised transmitter
- option D <u>delete ALL positions ("0", "1", "H", etc.</u>). Caution! This deletion should only be performed if you wish reprogram the distances using a procedure <u>different from the one used previously</u> (e.g. you have used manual distance programming (C.6) and would now like to use the
- semi-automatic procedure (C.8).

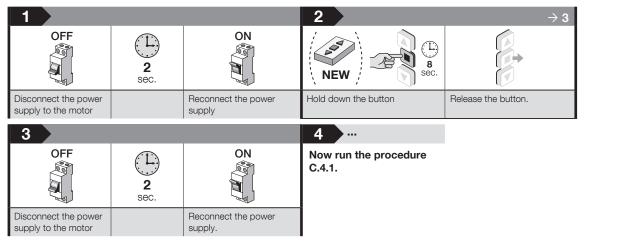


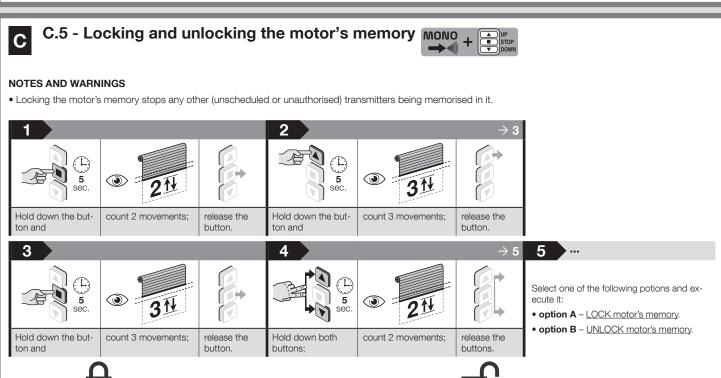


C.4.2 - Procedure performed with an <u>unmemorised transmitter</u>

₫

option –



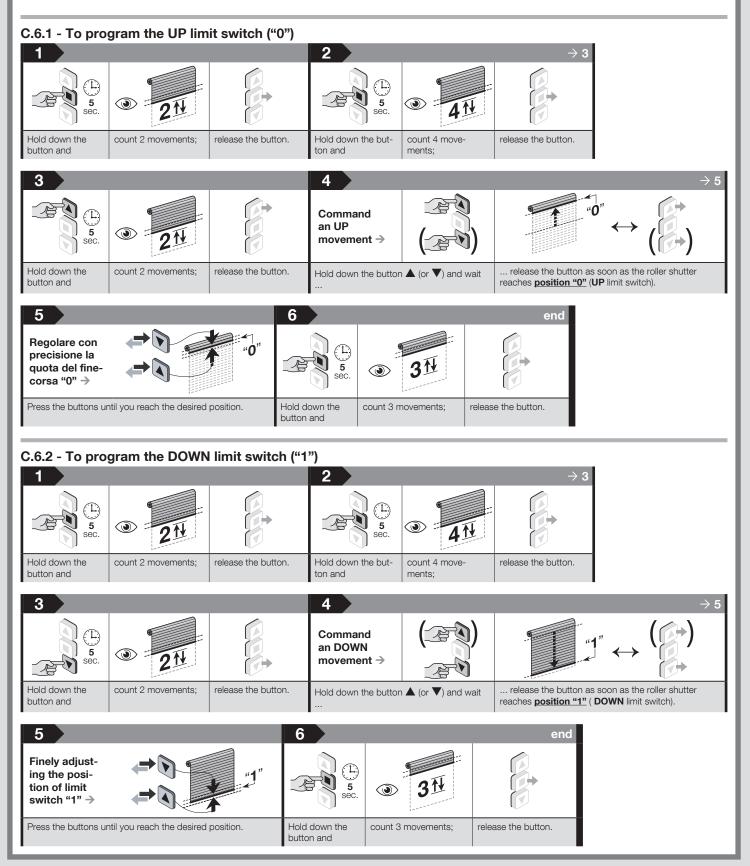


### C.6 - MANUAL programming of the UP ("0") and DOWN ("1") limit switches MONO

#### NOTES AND WARNINGS

С

- This procedure is obligatory only for roller shutters without a mechanical stop at the Up position.
- This procedure can be used if the limit switches have been programmed using the semiautomatic procedure (C.8)".
- After the limit positions have been programmed, the roller shutter can be controlled by simply pressing the appropriate buttons on the control unit. The roller shutter will move between the positions set with procedures C.6.1 and C.6.2.
- If the limit switches have not been programmed yet, the roller shutter's direction of movement might not match the pressed button.
- 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 roller shutter will move within the limits defined by the two limit switch heights.

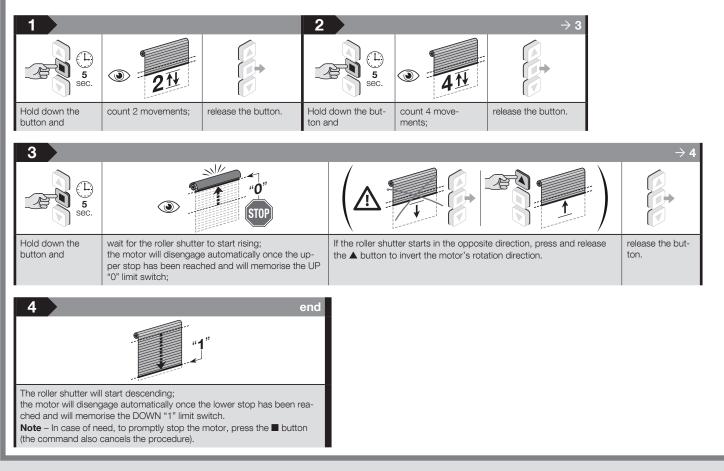


### C.7 - AUTOMATIC Programming of the UP ("0") and DOWN ("1") limit switches

#### NOTES AND WARNINGS

С

- Use this procedure only for roller shutters equipped with mechanical locking devices.
- If, previously, the limit switches were programmed with the "Manual (C.6)" programming, to complete this procedure before proceeding with the "Total or partial deletion of the memory [B.11.1 (motor configured for ONE-WAY communication), A.10.1 (motor configured for TWO-WAY communication) or C.4.1 (motor configured for ONE-WAY communication and OLD generation transmitter lacking the PRG and ESC keys) option 'A' or 'D']".
- After the limit positions have been programmed, the roller shutter can be controlled by simply pressing the appropriate buttons on the control unit. The roller shutter's movement will be limited by the limit switches (Up "0" and Down "1") programmed by the installer. With each impact, the height of this limit switch will be automatically updated by the "Automatic limit switch update" function (paragraph 5.4).
- 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 roller shutter will move within the limits defined by the two limit switch heights.

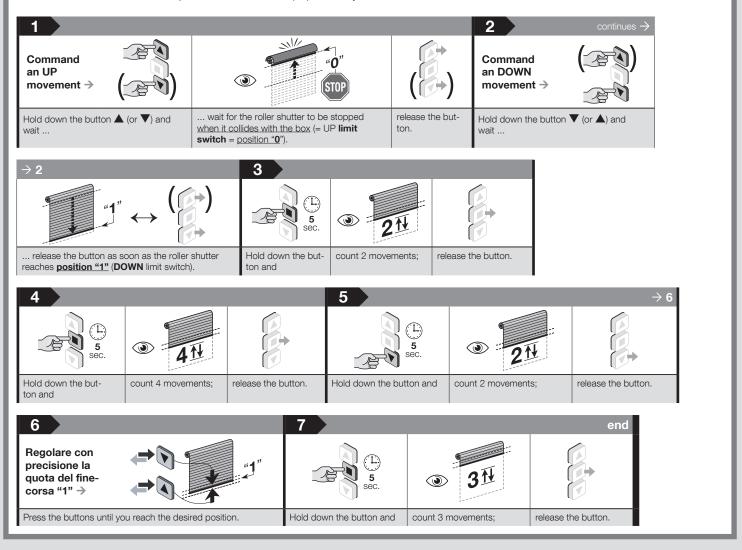


## C.8 - <u>SEMIAUTOMATIC programming</u> of the UP ("0") and DOWN ("1") limit switches

#### NOTES AND WARNINGS

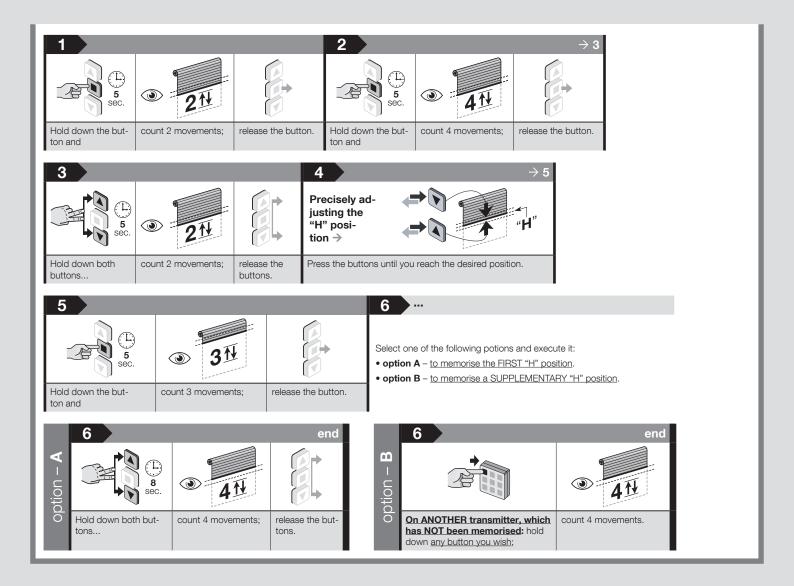
С

- Use this procedure solely for roller shutters with mechanical Up "0" limit switch stop.
- If, previously, the limit switches were programmed with the "Manual (C.6)" programming, to complete this procedure before proceeding with the "Total or partial deletion of the memory [B.11.1 (motor configured for ONE-WAY communication), A.10.1 (motor configured for TWO-WAY communication) or C.4.1 (motor configured for ONE-WAY communication and OLD generation transmitter lacking the PRG and ESC keys) option 'A' or 'D']".
- If the limit switches have not been programmed yet, the roller shutter's direction of movement might not match the pressed button.
- After the limit positions have been programmed, the roller shutter can be controlled by simply pressing the appropriate buttons on the control unit. The Up movement will be limited when the roller shutter impacts against the mechanical lock (box) in the Upper limit switch "0". With each impact, the height of this limit switch will be automatically updated by the "Automatic limit switch update" function (paragraph 5.4). Conversely, the Down movement will be limited by the Lower limit switch "1" (limit switch set by the installer at a desired point).
- 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. During the ascent, the roller shutter will be stopped by the impact against the structure's mechanical stops (= Up "0" limit switch), while during the descent the roller shutter will stop at the down limit switch ("1") defined by the installer.



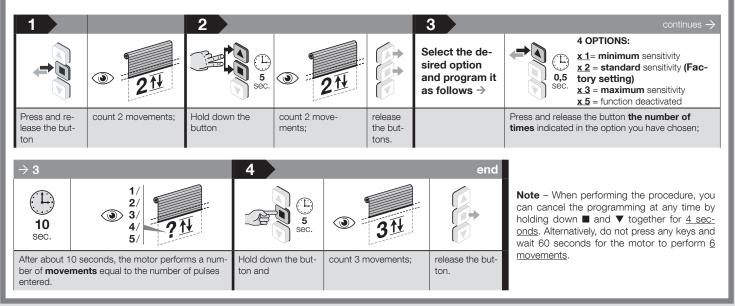
### C.9 - Programming an INTERMEDIATE POSITION (position "H") MONO

- This procedure memorises an intermediate position (position "H") between the Up ("0") and Down ("1") limit switch positions. When the automation is being used, after giving the **intermediate position** command, the system will automatically stop the roller shutter at the programmed "H" position.
- Up to 30 "H" positions can be memorised if the motor is configured to operate in ONE-WAY mode, or up to 6 "H" positions if the motor is configured to operate in TWO-WAY mode, in any desired position, provided that they are within the space delimited by the two limit switches. These positions can <u>only be programmed after</u> the limit switch positions. Repeat this procedure for each position you wish to memorise.
- The first "H" position must be programmed using the buttons **A**+**V**, on the transmitter used to run the procedure itself. However, each subsequent position "H" must be programmed using a button on another non-memorised transmitter.
- To change an existing "H" position, move the awning to the desired height and run this procedure; in **step 06**, however, press the button associated with the existing "H" position you are changing.





- This function prevents the roller shutter from remaining excessively taut 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.
- The maximum allowed sensitivity level in order to have a reliable application depends on the type, weight and dimensions of the roller shutter.
- After changing the setting, the automation must complete AT LEAST three complete cycles in order to apply the chosen sensitivity level.
- Warning! This function is active with the factory setting but is not applicable if the limit switches are programmed with the manual procedure C.6.



#### 5.1 - Maximum continuous work cycle

In general, the motors in the "NEXT" line were designed for residential use and therefore for discontinuous use. The motor is designed for residential use, in other words, for intermittent service. In case of extended use, the system limits the motor speed (to the minimum speed) to protect the motor against excessive overheating; in this way, the continuous usage time increases, allowing extended use until the thermal protection device intervenes.

## 5.2 - Commanding partial opening/closing of the roller shutter

The table shown below summarises the keys to be pressed on the transmitter to send the main opening/closing commands of the roller shutter. These functions are described in detail in the following paragraphs.

| Key to be pressed to send<br>the command   | Motor action  |  |
|--|---|--|
| (UP)   | Positioning at the position relative to the UP limit<br>switch  |  |
| (DOWN)   | Positioning at the position relative to the DOWN lim-<br>it switch  |  |
| (STOP)   | Stops the movement  |  |
| i  | Provides feedback on the position   |  |
| SLIDER (FAST TOUCH)  | Change of position  |  |
| SLIDER + (3 sec)   | Increases the motor speed<br>(the motor confirms that the command has been re-<br>ceived with a brief movement) |  |
| SLIDER • (3 sec)   | Normal motor speed<br>(the motor confirms that the command has been re-<br>ceived with a brief movement)        |  |
| SLIDER - (3 sec)   | Decreases the motor speed<br>(the motor confirms that the command has been re-<br>ceived with a brief movement) |  |
| ▲ (UP) + ■ (STOP) Positioning at 90% of the path completed before<br>0-UPPER limit switch is reached |   |  |
| ■ (STOP) + ▼ (DOWN)  | Positioning at 10% of the path completed before the<br>0-UPPER limit switch is reached                          |  |
| ▲ (UP) + ▼ (DOWN)  | Positioning at 50% of the path<br>(first pre-set position H)  |  |

#### 5.2.1 - Commanding the "H" position

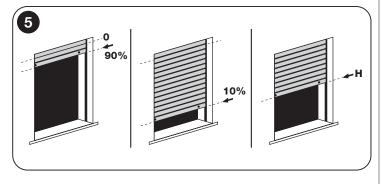
In general, to command the partial opening/closing of the awning (or shutter), press the key associated with the partial height during programming (for more information, read the procedure **B.6**, **A.6** or **C.9**). If the transmitter has only three keys and only one "H" height is memorised, simultaneously press keys **A** and **V** to recall this height. If, during the installation phase, the "H" position was not programmed, it will assume the factory value corresponding to the point located between the UPPER and LOWER limit switches.

#### 5.2.2 - Commanding the "90%" and "10%" positions

Two additional partial positions are available (fig. 5), factory-set to the following values:

- "90%" position = 90% of the path completed before the 0-UPPER limit switch is reached (90% of the awning rolled up);
- "10%" position = 10% of the path completed before the 0-UPPER limit switch is reached (10% of the awning rolled up).

To recall the "90%" position, press buttons  $\blacktriangle + \blacksquare$  (UP + STOP). To recall the "10%" position, press buttons  $\triangledown + \blacksquare$  (DOWN + STOP).



## 5.3 - The user can vary the awning position with a transmitter equipped with a "slider" surface

It is equally important to be able to set the automation's stop position in relation to the circumstances (sunshine, rain, etc.).

If the automation is controlled with a Nice transmitter equipped with a "slider" surface (e.g. P1V, etc.), the stop position of the automation can be varied as follows: the top of the "slider" moves the automation upwards (as far as the upper limit switch position); the bottom of the "slider" moves the automation downwards (as far as the lower limit switch).

#### 5.4 - "Automatic limit switch update" function

**Caution!** – This function is only available if the limit switches have been programmed with the Automatic (paragraph **B.4**, **A.4** or **C.7**) or Semi-automatic procedure (paragraph **B.5**, **A.5** o **C.8**). This function cannot be disabled.

Periodically the function activates automatically during an up manoeuvre: the roller shutter impacts against the box or other mechanical stop updating the position of the limit switch (Up "0" limit switch). Over time, this compensates for deformations in the structure due to wear and thermal cycles, so that the roller shutter always stops precisely at the Up limit position.

#### 6 OPTIONAL ACCESSORIES

#### 6.1 - Climate sensors for wind, sun, rain

**WARNING!** – The climate sensors must not be considered safety devices capable of eliminating failures in the rolling shutter caused by rain or strong wind; in fact a mere power outage will prevent the awning from moving. Consequently, these sensors must be considered components of an automation device for protecting the awning. The manufacturer declines all liability for any material damages caused by atmospheric events not detected by the sensors.

#### 6.1.1 - Definitions and conventions

- Manual "Sun On" Command = enables 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 = disables 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 because of the over threshold wind intensity.
- "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,

#### 6.1.2 - Behaviour of the motor in each kind of weather condition

The climate sensors allow you to automate awning/shutter operation in relation to the current weather conditions.

For all sensors, the actuation setpoints must be programmed on the sensors themselves.

#### Response of the automation to the Sun sensor (fig. 6)

(note – the following automatic operation of the motor will only happen if it was programmed the close / partial opening "H", otherwise the engine will not move). When the intensity of the sun is over threshold, if the rolling shutter is at a point between the "0" limit switch and a partial "H" height, the motor brings the shutter to the nearest partial "H" height. On the contrary, if the shutter is in other positions, the motor does not move it. When the sun is under threshold, the motor is not moved to the shutter.

#### Response of the automation to the Rain sensor (fig. 7)

When there is rain, the system commands closure up the shutter. This condition prevails over the sun sensor.

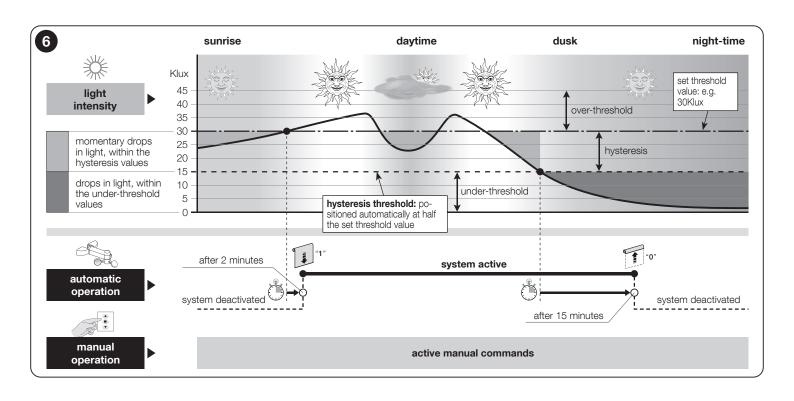
#### Response of the automation to the Wind sensor (fig. 8)

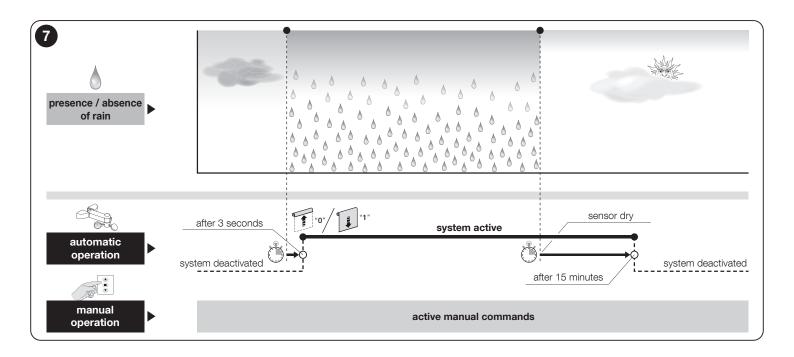
When the intensity of the wind is over threshold, this system commands closure of the shutter. This condition prevails over the Rain and Sun sensor.

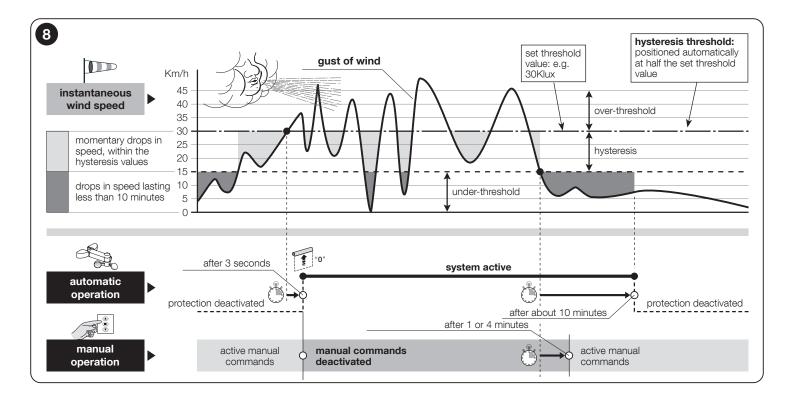
#### **Generalities:**

The automatic operation of the motor by means of the commands received by the cli-

- mate sensors does not block the manual commands sent by the user of the shutter."Rain present" and "wind over threshold" conditions inhibit the operation of the sun sensor.
- The manual command "Sun-ON" enables ("Sun-OFF" disables) only the operation of the Sun sensor.
- The manual commands Raise, Stop, Lower and Partial Opening sent by the user to the motor do not deactivate the operation of the Sun Wind or Rain sensors unless the
- command completely closes the shutter.
- When the shutter is completely closed, no climate sensor is able to open it in automatic mode.







#### 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. U When sending a Raise command, the motor does not start:

This can happen if the roller shutter is near the Upper limit switch ("0"). In this case you must lower the roller shutter 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 (procedure B.11, A.10 or C.4) 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 legal disposal of this product.

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

#### **Technical Characteristics**

■ Frequency 433.92 MHz ■ Power emitted: 0 dBm ■ Radio coding: "BD".

#### Refer to the technical characteristics stated on the motor's nameplate.

Note: • All technical specifications stated herein refer to an ambient temperature of 20° C (± 5° C). • Nice S.p.A. reserves the right to apply modifications to products at any time when deemed necessary, maintaining the same intended use and functionality.

#### Simplified EU declaration of conformity

Hereby, NICE S.p.A., declares that the radio equipment type NX FIT MA 1017 SH BD, NX FIT MA 2017 SH BD, is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address: https://www.niceforyou.com/en/support.

#### COMPLIANCE WITH THE FCC RULES (PART 15) AND RSS-210 RULES

This device complies with Industry Canada's licence-exempt RSS-210s, and with Part 15 of the FCC rules of the United States of America. Operation is subject to the following two conditions: (1) this device may not cause interference; (2) this device must accept any interference, including interference that may cause undesired operation of the device. Any changes or modifications made to this device, without the express permission of the manufacturer, may void the user's authority to operate this device.

## Nice

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