

CE



For sliding gates



Road200

Instructions and warnings for the fitter

Istruzioni ed avvertenze per l'installatore

Instructions et recommandations pour l'installateur

Anweisungen und Hinweise für den Installateur

Instrucciones y advertencias para el instalador

Instrukcje i uwagi dla instalatora

Aanwijzingen en aanbevelingen voor de installateur

COMPANY
WITH QUALITY SYSTEM
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Road200

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1) Warnings

This manual contains important information regarding safety. Before you start installing the components, it is important that you read all the information contained herein. Store this manual safely for future use.

Due to the dangers which may arise during both the installation and use of the ROAD200, installation must be carried out in full respect of the laws, provisions and rules currently in force in order to ensure maximum safety. This chapter provides details of general warnings. Other, more specific warnings are detailed in Chapters “3.1 Preliminary Checks” and “5 Testing and Commissioning”.

⚠ According to the most recent European legislation, the production of automatic doors or gates is governed by the provisions listed in Directive 98/37/CE (Machine Directive) and, more specifically, to provisions: EN 12445, EN 12453 and EN 12635, which enable manufacturers to declare the presumed conformity of the product.

Please access “www.niceforyou.com” for further information, and guidelines for risk analysis and how to draw up the Technical Documentation.

- This manual has been especially written for use by qualified fitters. Except for the enclosed specification “Instructions and Warnings for Users of the ROAD gearmotor” which is to be removed by the installer, none of the information provided in this manual can be considered as being of interest to end users!
- Any use or operation of ROAD200 which is not explicitly provided for in these instructions is not permitted. Improper use may cause damage and personal injury.
- Risk analysis must be carried out before starting installation, to include the list of essential safety requisites provided for in Enclosure I of the Machine Directive, indicating the relative solutions employed. N.B.

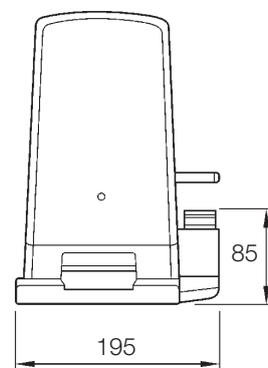
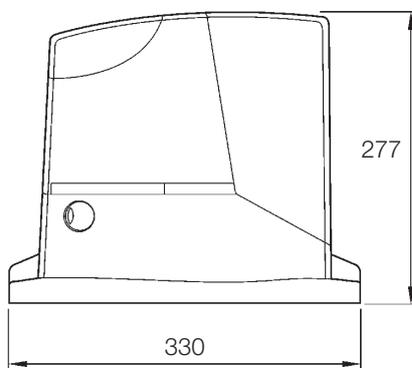
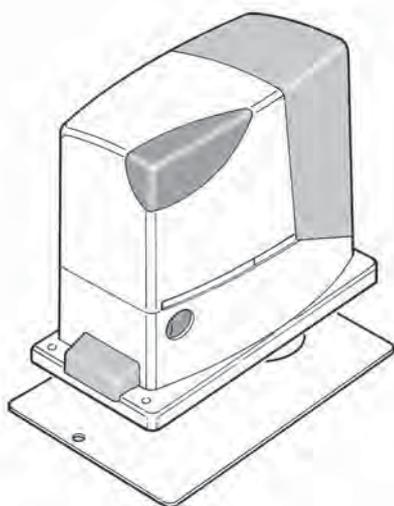
Risk analysis is one of the documents included in the “Technical Documentation” for this automation.

- Check whether additional devices are needed to complete the automation with ROAD200 based on the specific application requirements and dangers present; for example, risk of impact, crushing, shearing and dragging etc must be taken into consideration as well as other general dangers.
- Do not modify any components unless such action is specified in this manual. Operations of this type are likely to lead to malfunctions. NICE disclaims any liability for damage resulting from modified products.
- During installation and use, ensure that solid objects or liquids do not penetrate inside the control unit or other open devices. If necessary, please contact the NICE customer service department; the use of ROAD200 in these conditions can be dangerous.
- The automation system must not be used until it has been commissioned as described in chapter 5: “Testing and commissioning”.
- The packing materials of ROAD200 must be disposed of in compliance with local regulations.
- If a fault occurs that cannot be solved using the information provided in this manual, refer to the NICE customer service department.
- In the event that any automatic switches are tripped or fuses blown, you must identify the fault and eliminate it before resetting the switches or replacing fuses.
- Disconnect all the power supply circuits before accessing the terminals inside the ROAD200 cover. If the disconnection device is not identifiable, post the following sign on it: “WARNING: MAINTENANCE WORK IN PROGRESS”.

2) Product description and applications

ROAD200 is an electromechanical gearmotor used to automate sliding gates for residential use. It has an electronic control unit and receiver for radio control devices.

ROAD200 operates with electric power. In the event of a power failure, the gearmotor can be released using a suitable key in order to move the gate manually.



2.1) Operating limits

Chapter 8 "Technical Characteristics" provides the data needed to determine whether ROAD200 components are suitable for the intended application.

In general, ROAD200 is suitable for the automation of gates featuring leaves up to 5 m wide and weighing up to 200 kg, as shown in Tables 1 and 2.

The length of the leaf makes it possible to determine both the maximum number of cycles per hour and consecutive cycles, while the weight makes it possible to determine the reduction percentage of the cycles and the maximum speed allowed. For example, if the leaf is 3.8 m long it will be possible to have 15 cycles/hour and 10 consecutive cycles. However, if the leaf weighs 170 Kg, they must be reduced to 70%, resulting in 11 cycles/hour and approximately 7 consecutive cycles.

The control unit has a limiting device which prevents the risk of overheating based on the load of the motor and duration of the cycles. This device triggers when the maximum limit is exceeded.

Table 1: limits in relation to the length of the leaf.

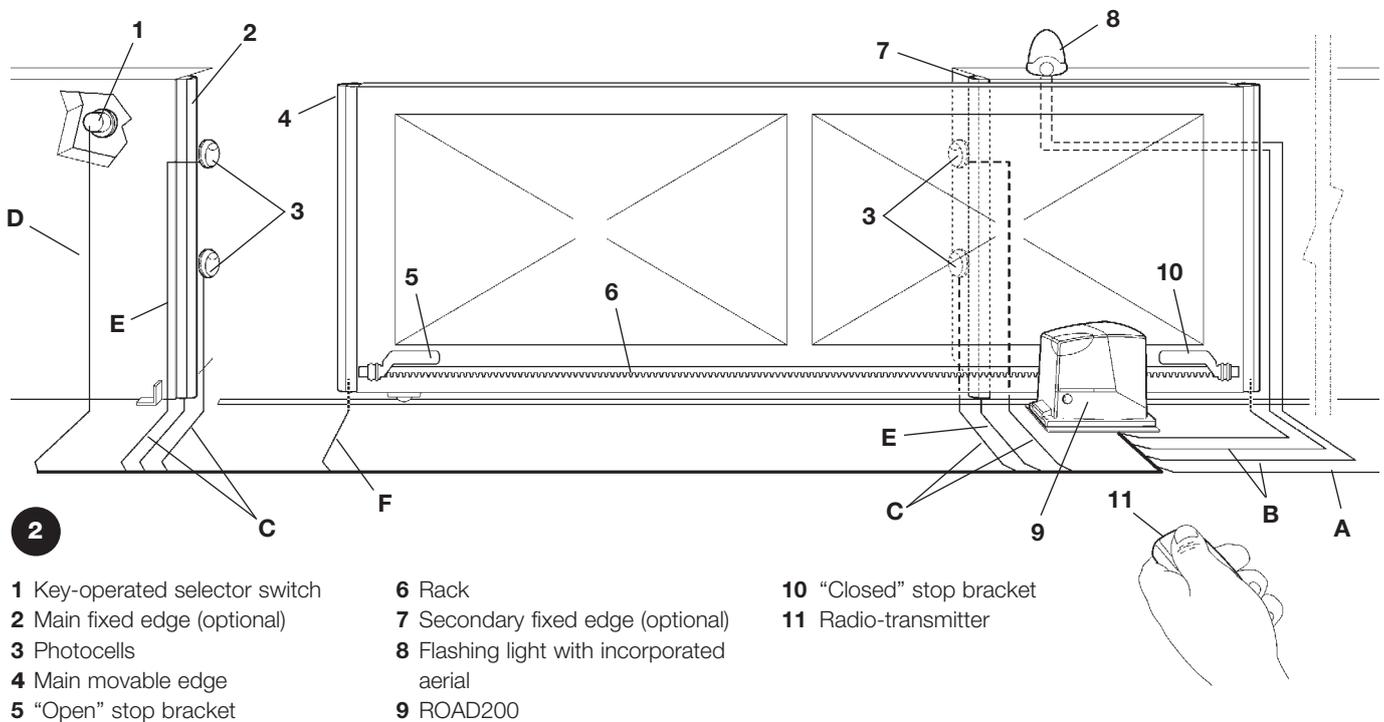
Leaf width m	max. cycle/hour	max. no. of consecutive cycles
up to 3	20	13
3 - 4	15	10
4 - 5	12	8

Table 2: limits in relation to the weight of the leaf.

Leaf weight Kg.	% cycles
up to 100	100%
100÷150	85%
150÷200	70%

2.2) Typical system

Figure 1 shows a typical system for automating a sliding gate using ROAD200.



2.3) List of cables

Figure 2 shows the cables needed for the connection of the devices in a typical installation; table 3 shows the cable characteristics.

⚠ The cables used must be suitable for the type of installation; for example, an H03VV-F type cable is recommended for indoor applications, while H07RN-F is suitable for outdoor applications.

Table 3: List of cables

Connection	Cable type	Maximum length allowed
A: Power line	One 3x1.5mm ² cable	30 m (note 1)
B: Flashing light with aerial	One 2x0.5mm ² cable	20m
	One RG58 type shielded cable	20 m (recommended less than 5 m)
C: Photocells	One 2x0.25mm ² cable for TX	30m
	One 4x0.25 mm ² cable for RX	30m
D: Key-operated selector switch	Two 2x0.5mm ² cables (note 2)	50m
E: Main sensitive edge	One 2x0.5mm ² cable (note 3)	30m
F: Movable edges	One 2x0.5mm ² cable (note 3)	30m (note 4)

Note 1: power supply cable longer than 30 m may be used provided it has a larger gauge, e.g. 3x2.5mm², and that a safety grounding system is provided near the automation unit.

Note 2: A single 4x0.5mm² cable can be used instead of two 2x0.5mm² cables.

Note 3: Please refer to Chapter "7.3.1 STOP Input" in situations where there is more than one edge, for information about the type of connection recommended by the manufacturer.

Note 4: special devices which enable connection even when the leaf is moving must be used to connect movable edges to sliding leaves.

3) Installation

⚠ The installation of ROAD200 must be carried out by qualified personnel in compliance with current legislation, standards and regulations, and the directions provided in this manual.

3.1) Preliminary checks

Before proceeding with the installation of ROAD200 you must:

- Check that all the materials are in excellent condition, suitable for use and that they conform to the standards currently in force.
- Make sure that the structure of the gate is suitable for automation.
- Make sure that the weight and dimensions of the leaf fall within the specified operating limits provided in chapter "2.1 Operating limits".

Check that the static friction (that is, the force required to start the movement of the leaf) is less than half the "maximum torque", and that the dynamic friction (that is, the force required to keep the leaf in movement) is less than half the "nominal torque". Compare the resulting values with those specified in Chapter "8 Technical Characteristics". The manufacturers recommend a 50% margin on the force, as unfavourable climatic conditions may cause an increase in the friction.

- Make sure that there are no points of greater friction in the opening or closing travel of the gate leaves.
- Make sure there is no danger of the gate derailing and risk of it exiting the guide.
- Make sure that the mechanical stops are sturdy enough and that there is no risk of the deformation even when the leaf hits the mechanical stop violently.
- Make sure that the gate is well balanced: it must not move by itself when it is placed in any position.
- Make sure that the area where the gearmotor is fixed is not subject to flooding. If necessary, mount the gearmotor raised from the ground.

- Make sure that the area in which the gearmotor is mounted allows it to be easily released and that the manual manoeuvre is easy and safe.
- Make sure that the mounting positions of the various devices are protected from impacts and that the mounting surfaces are sufficiently sturdy.
- Components must never be immersed in water or other liquids.
- Keep ROAD200 away from heat sources and naked flames; in acid, saline or potentially explosive atmosphere; this could damage ROAD200 and cause malfunctions or dangerous situations.
- If there is an access door in the leaf, or within the range of the gate movement, make sure that it does not obstruct normal travel. Mount a suitable interblock system if necessary.
- The control unit must be connected to a power supply line equipped with a safety grounding system.
- The power supply line must be protected by suitable magneto-thermal and differential switches.
- A disconnection device must be inserted in the power supply line from the electrical mains (the distance between the contacts must be at least 3.5 mm with an overvoltage category of III) or equivalent system, for example an outlet and relative plug. If the disconnection device for the power supply is not mounted near the automation, it must have a locking system to prevent unintentional, unauthorised connection.

3.2) Installation of the gearmotor

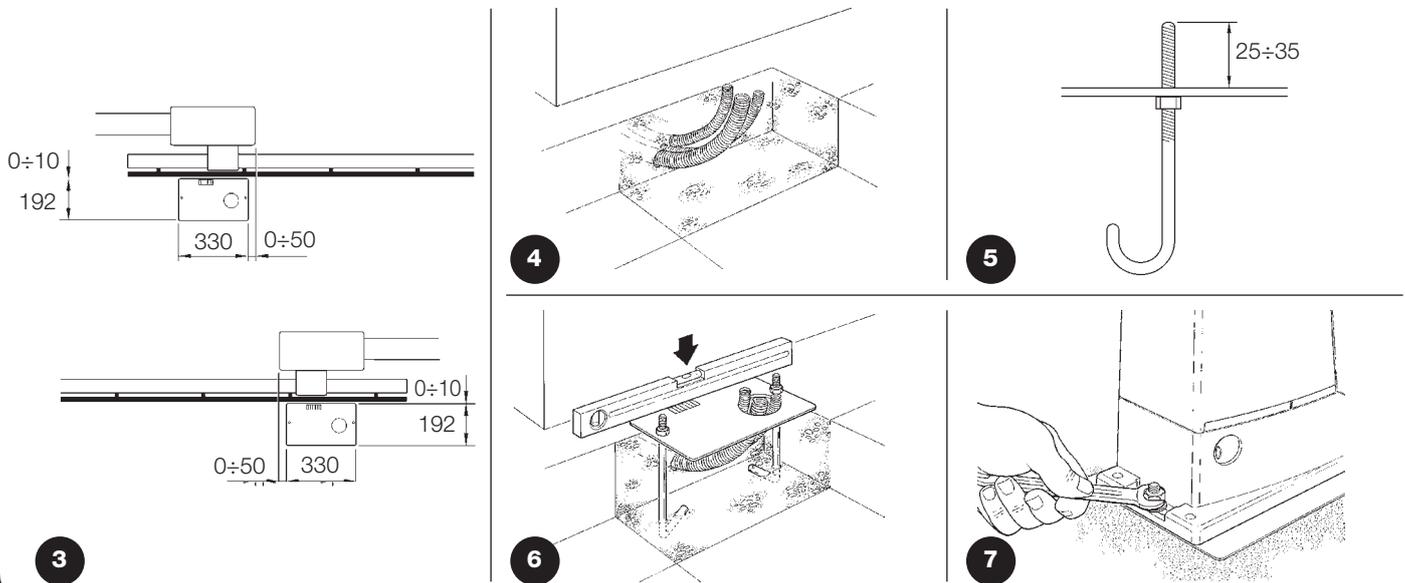
The gearmotor must be fastened directly to an already existing mounting surface using suitable means, for example expansion screw anchors. Otherwise, in order to fasten the gearmotor the installer must:

1. Dig a foundation hole with suitable dimensions referring to Figure 3.
2. Prepare one or more conduits for the electrical cables as shown in figure 4
3. Assemble the two clamps on the foundation plate setting one nut underneath and one on top of the plate.

The nut underneath the plate must be as shown in Figure 5 screwed so that the threaded part protrudes above the plate by approximately 25÷35 mm.

4. Pour the concrete and position the foundation plate at the distances shown in fig. 3, making sure it is level and in line with the leaf before the concrete sets. Wait for the concrete to harden completely.
5. Remove the 2 upper nuts of the plate and then place the gearmotor onto them.

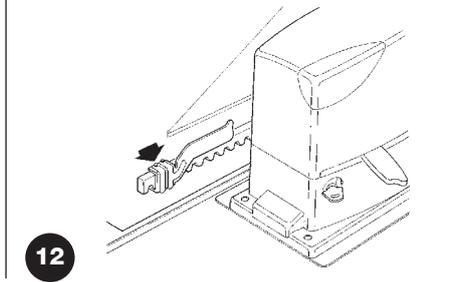
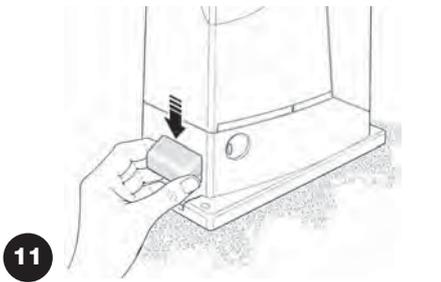
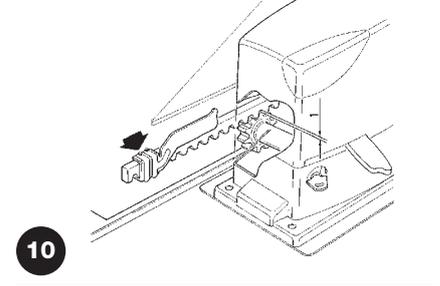
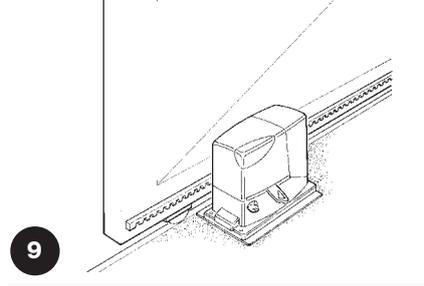
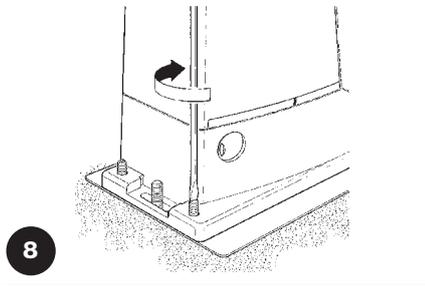
Check that it is perfectly parallel to the leaf, then screw the two nuts and washers supplied, as shown in Figure 7.



If the rack is already present, once the gearmotor has been fastened, use the adjustment dowels as shown in Figure 8 to set the pinion of ROAD200 to the right height, leaving 1÷2 mm of play from the rack.

Otherwise, in order to fasten the rack the installer must:

6. Release the gearmotor as shown in paragraph "Release and manual movement" of Chapter "Instructions and Warnings for users of the ROAD gearmotor"
7. Open up the leaf completely and place the first piece of the rack on the pinion. Check that the beginning of the rack corresponds to the beginning of the leaf, as shown in Figure 9. Leave a 1÷2mm play between the rack and the pinion, then fasten the rack to the leaf using suitable means.



⚠ In order to prevent the weight of the leaf from affecting the gearmotor, it is important that there is a play of 1÷2mm between the rack and the pinion as shown in Figure 10.

8. Slide the leaf and use the pinion as a reference point to fasten other elements of the rack.
9. Cut away the exceeding part of the rack.
10. Open and close the gate several times by hand and make sure that the rack is aligned with the pinion with a maximum tolerance of 5mm. Moreover, check that the play of 1÷2mm has been respected along the entire length between the pinion and the rack.
11. Thoroughly tighten the two fixing nuts of the gearmotor making sure it is well fastened to the ground. Cover the fixing nuts with the relative caps as shown in figure 11.
12. Fix the two "Opening" and "Closing" limit switch brackets with the relative dowels to the outer sides of the rack as shown in Figure 12. Consider that the leaf will slide for about another 2÷3cm after the limit switch cuts in. The brackets should be positioned at a sufficient distance from the mechanical stops.
13. Lock the gearmotor as shown in paragraph "Release and manual movement" of Chapter "Instructions and Warnings for users of the ROAD gearmotor".

3.3) Installation of the various devices

If other devices are need, install them following the directions provided in the corresponding instructions. Check this in paragraph "3.5 Description of electrical connections" and the devices which can be connected to the ROAD200 in Figure 1.

3.4) Electrical connections

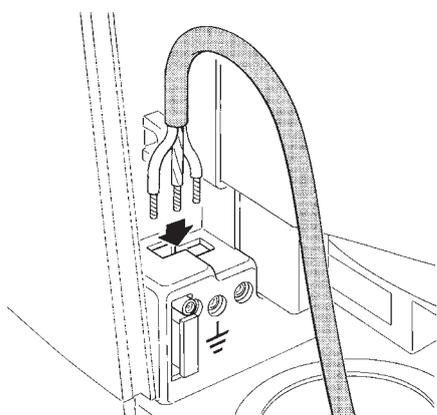
⚠ Only carry out electrical connections once the electricity supply to the system has been switched off. Disconnect any buffer batteries present.

1. Remove the protection cover in order to access the electronic control unit of the ROAD200. The side screw must be removed, and the cover lifted upwards.
2. Remove the rubber membrane which closes the hole for passage of the cables and insert all the connection cables towards the various devices, leaving a length of 20÷30cm longer than necessary. See Table 3 for information regarding the type of cables and Figure 2 for the connections.
3. Use a clamp to collect together and join the cables which enter the gearmotor. Place the clamp just underneath the hole the cables enter through. Make a hole in the rubber membrane which is slightly smaller than the diameter of the cables which have been collected together, and insert the membrane along the cables until you reach the clamp.

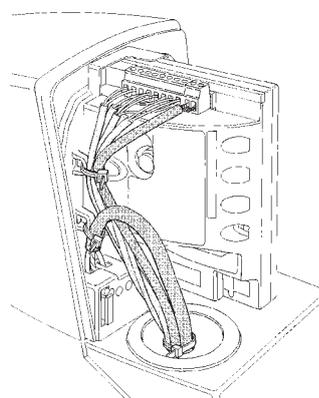
Then put the membrane back in the slot of the hole the cables pass through. Lay a second clamp for collecting the cables which are set just above the membrane.

4. Connect the power cable to the appropriate terminal as shown in figure 13, then block the cable at the first cable block ring using the clamp.
5. Connect up the other cables according to the diagram in Figure 15. The terminals can be removed in order to make this work easier.
6. Once the connections have been completed, block the cables collected in the second cable block ring using clamps. The excess of the aerial cable must be blocked to the other cables using another clamp as shown in Figure 14.

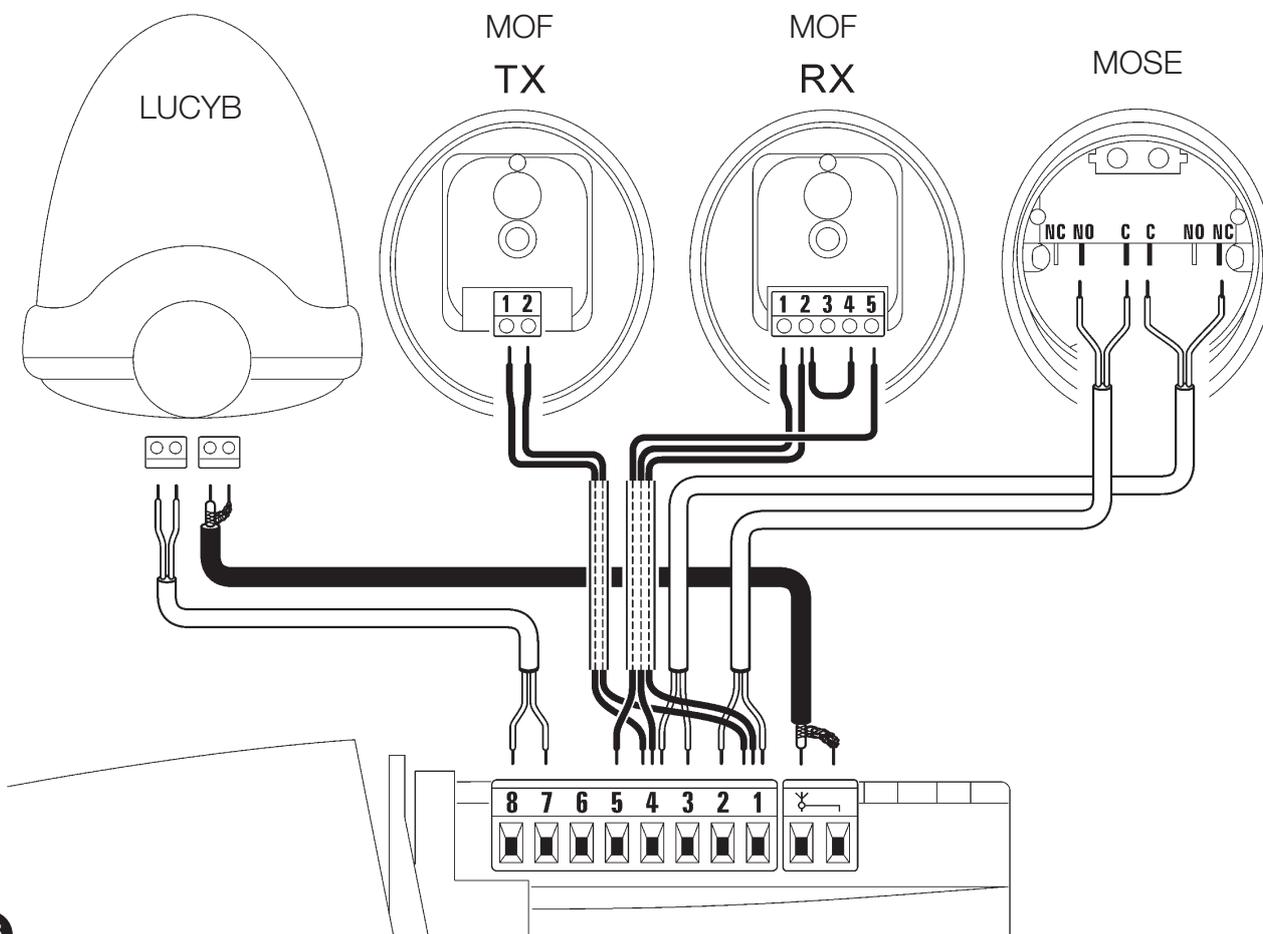
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3.5) Description of the electrical connections

The following is a brief description of the electrical connections; for further information please read "7.3 Adding or Removing Devices" paragraph.

Terminals	Function	Description
	Aerial	Connection input for the radio receiver aerial. LUCY B has an incorporated aerial; alternatively an external aerial can be used or a section of wire already present on the terminal can be left to serve as an aerial.
1 - 2	Step-By-Step	input for devices which control movement. It is possible to connect "Normally Open" devices up to this input.
3 - 4	Stop	input for the devices which block or eventually stop the manoeuvre in progress. Contacts like "Normally Closed", "Normally Open" or constant resistance devices can be connected up using special procedures on the input. For more useful information about STOP see also Paragraph "7.3.1 STOP Input".
1 - 5	Photocell	input for safety devices such as photocells. Cut-in during closure inverting the manoeuvre. It is possible to connect "Normally Close" contacts. For more useful information about PHOTO see also Paragraph "7.3.2 Photocells".
4 - 6	Phototest	all safety devices are controlled every time a manoeuvre is performed and the manoeuvre starts only if the test is positive. This is possible using a particular type of connection; the "TX" photocell transmitters and the "RX" receivers are powered separately from one another. For more useful information about the connection see also Paragraph "7.3.2 Photocells".
7 - 8	Flashing light	a NICE "LUCY B" flashing light with a 12V 21W car bulb can be connected to this output. During the manoeuvre the unit flashes at intervals of 0.5 s

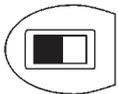
4) Final checks and start up

The manufacturers recommend you position the leaf at approximately half travel before starting the checking and start up phase of the automation. This will ensure the leaf is free to move both during opening and closure.

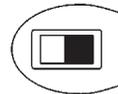
4.1) Choosing the direction

The direction of the opening manoeuvre must be chosen depending on the position of the gearmotor with respect to the leaf. If the leaf must open towards the left, the selector must be moved to the left

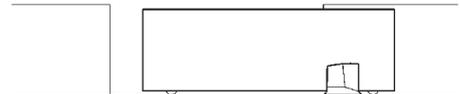
as shown in Figure 16; alternatively, if the leaf has to open towards the right, the selector must be moved to the right as shown in Figure 17.



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4.2) Power supply connection

⚠ The connection of ROAD200 to the mains must be made by qualified and experienced personnel in strict observance of current legislations, standards and regulations.

As soon as ROAD200 is energized, you should check the following:

1. Make sure that the "OK" LED flashes regularly, with about one flash per second.
2. Check that the motor does not control the door movement and that the courtesy light is off.

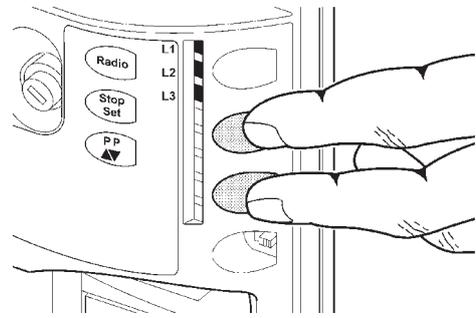
If the above conditions are not satisfied, you should immediately switch off the power supply to the control unit and check the electrical connections more carefully.

Please refer to Chapter "7.6 Troubleshooting" for further information about finding and analysing failures.

4.3) Recognizing the length of the leaf

The control unit must recognize the opening and closing positions of the gate. During this stage, the length of the leaf is measured from the closing limit switch to the opening limit switch. This measurement is required to calculate the deceleration points and the partial opening point. In addition to the positions, the STOP input configuration and the presence or non-presence of the PHOTO input connection in the "Phototest" mode, is detected and memorised in this phase.

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1. Press buttons **[▲▼]** and **[Set]** and hold them down
2. Release the buttons when the manoeuvre starts (after approx. 3 s)
3. Check the manoeuvre in progress is a closing manoeuvre. Otherwise, press the **[STOP]** button and carefully check Paragraph "4.1 Choosing the Direction", then repeat the process from Point 1.
4. Wait for the control unit to complete the self-learning phase:
5. Push the **[PP]** button to perform the complete opening manoeuvre.
6. Push the PP button to perform the closing manoeuvre.

If the above conditions are not satisfied, you should immediately switch off the power supply to the control unit and check the electrical connections more carefully. At the end of the self-learning process, if leds L3 and L4 flash, this means there is an error; see paragraph "7.6 Troubleshooting".

The learning stage of the leaf length and of the STOP and PHOTO input configuration can be repeated at any time, even after installation (for example if one of the limit switch brackets is moved); simply repeat the procedure from point 1.

4.4) Checking gate movements

On completion of the recognition of the length of the leaf, it is advisable to carry out a number of manoeuvres in order to check the gate travels properly.

1. Press the **[PP]** button to open the gate. Check that gate opening occurs regularly, without any variations in speed. The leaf must only slowdown and stop when it is between 50 and 30 cm from the opening mechanical stop. Then, at 2÷3 cm from the mechanical opening stop the limit switch will trigger.
2. Press the **[PP]** button to close the gate. Check that gate closing occurs regularly, without any variations in speed. The leaf must only slowdown and stop when it is between 70 and 50 cm from the closing mechanical stop. Then, at 2÷3 cm from the mechanical closing stop the limit switch will trigger.
3. During the manoeuvre, check that the flashing light flashes at 0.5 second intervals.
4. Open and close the gate several times to make sure that there are no points of excessive friction and that there are no defects in the assembly or adjustments.
5. Check that the fastening of the ROAD200 gearmotor, the rack and the limit switch brackets are solid, stable and suitably resistant, even if the gate accelerates or decelerates sharply.

4.5) Preset functions

The ROAD200 control unit has a number of programmable functions. These functions are set to a configuration which should satisfy most automations. However, the functions can be altered at any time by means of a special programming procedure. Please refer to paragraph "7.2 Programming" for further information about this.

4.6) Radio receiver

ROAD200 can be remotely controlled by means of a radio receiver that is incorporated in the control unit and which operates at a frequency of 433.92 MHz, compatible with the following types of transmitters:

Because the type of encoding is different, the first transmitter introduced determines the type of transmitter that can be introduced afterwards. Up to 160 transmitters can be memorised.

Table 4: transmitters

FLO	FLO1 – FLO2 – FLO4 VERY VE
FLOR	FLOR1 – FLOR2 – FLOR4 VERY VR ERGO1 – ERGO4 – ERGO6 PLANO1 – PLANO4 – PLANO6
SMILO	SM2 – SM4

4.7) Memorization of radio transmitters

Each radio transmitter is recognised by the said receiver by means of a “code” which is different from that of any other transmitter. A “memorisation” phase must therefore be performed in order to allow the receiver to recognise each single transmitter. Transmitters can be memorised in 2 modes:

Mode I: in this mode the function of the transmitter buttons is fixed and each button corresponds to the command in the control unit shown in Table 5. A single stage is carried out for each transmitter, during which all the transmitter buttons are memorised. It does not matter which button is pressed during this stage and only one place in the memory is used. A transmitter can normally only control a single automation in Mode I.

Mode II: in this mode, each transmitter button can be associated with one of the 4 possible control unit commands shown in Table 6. Only one button is memorised for each stage, namely the one which was pressed during memorisation. One place in the memory is occupied for each button memorised.

In Mode II; different buttons on the same transmitter can be used in order to give the same automation more than one command or to control more than one automation. For example, in Table 7, only automation “A” is controlled, and the T3 and T4 buttons are associated with the same command. Alternatively, three automations are controlled in the example shown in Table 8, namely “A” (buttons T1 and T2), “B” (button T3) and “C” (button T4).

⚠ Since the memorization procedures are timed (10s), you must read the instructions in the following paragraphs before you proceed with their execution.

Table 5: Memorization Mode I

T1 button	“Step-by-step” command
T2 button	“Pedestrian gate” command
T3 button	“Open” command
T4 button	“Close” command

Note: single-channel transmitters only have a T1 button, two channel transmitters only have T1 and T2 buttons.

Table 6: commands available in Mode II

1	“Step-by-step” command
2	“Pedestrian gate” command
3	“Open” command
4	“Close” command

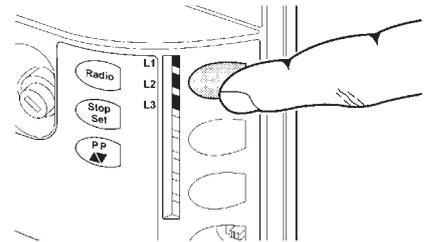
Table 7: example of memorization in Mode II

T1 button	“Open” command	Automation A
T2 button	“Close” command	Automation A
T3 button	“Pedestrian gate” command	Automation A
T4 button	“Pedestrian gate” command	Automation A

Table 8: example of memorization in Mode II

T1 button	“Open” command	Automation A
T2 button	“Close” command	Automation A
T3 button	“Step-by-step” command	Automation B
T4 button	“Step-by-step” command	Automation C

4.7.1) Memorization Mode I



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Table 9: to memorize a transmitter in mode I

	Example
1. Press the button on the receiver and hold it down (approx. 4 s)	4s
2. Release the button when the radio LED on the control unit lights up	4s
3. Within 10s, press any button on the radio transmitter to be memorized and hold it down for at least 3s	3s
4. If the memorization procedure is successful, the LED on the receiver will flash 3 times.	x3

If there are other transmitters to be memorized, repeat step 3 within the next 10s.

If no new codes are received within 10 seconds, the memorisation phase terminates.

4.7.2) Memorization Mode II

Table 10: to memorize the button of a transmitter in mode II

	Example
1. Press the radio button on the control unit as many times as the number corresponding to the desired command, according to table 5	1...4
2. Make sure that the radio LED on the control unit makes as many flashes as the number corresponding to the selected command	1...4
3. Within 10s, press any button on the radio transmitter to be memorized and hold it down for at least 3s	3s
4. If the memorization procedure is successful, the LED on the receiver will flash 3 times.	x3

If there are other transmitters to be memorized for the same command, repeat step 3 within the next 10s.

If no new codes are received within 10 seconds, the memorisation phase terminates.

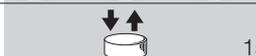
4.7.3) Remote” memorization

A new radio transmitter can be memorized without directly operating the buttons on the receiver. You need to have a pre-memorized operational radio transmitter. The “new” radio transmitter will inherit the characteristics of the old one, i.e. if the old radio transmitter was memorized in Mode 1, the new one will also be memorized in Mode 1. In this case, during the memorization stage you can press any button on the two transmitters. If, on the other hand, the old transmitter was memorized in Mode II, the new one will also be memorized in

Mode II: you must press the button on the old transmitter which corresponds to the desired command, and the button on the new transmitter to which you wish to associate that command.

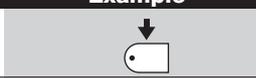
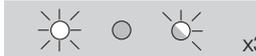
⚠ Remote memorisation can occur in all those receivers which are within range of the capacity of the transmitter. Therefore, only the one involved in the operation should be kept switched on.

Holding the two transmitters, position yourself within the operating range of the automation and perform the following operations:

Table 11: for the “Remote” memorization of a transmitter	Example
1. Press the button on the NEW radio transmitter and hold it down for at least 5s, then release it.	
2. Press button on the previously memorized transmitter slowly 3 times.	
3. Press the button on the new radio transmitter once slowly.	

At this point the new radio transmitter will be recognized by the receiver and will assume the characteristics of the previously memorized one. If there are other transmitters to be memorized, repeat all the steps above for each new transmitter.

4.7.4) Deleting the Radio Transmitters

Table 12: to delete all the radio transmitters	Example
1. Press the radio button on the control unit and hold it down	
2. Wait until the radio LED lights up, then wait until it goes off, then wait until it has flashed 3 times	
3. Release the radio button precisely upon the third flash	
4. If the procedure is successful, after a few moments the LED will flash 5 times.	

5) Testing and commissioning

This is the most important stage in the automation system installation procedure in order to ensure the maximum safety levels. Testing can also be adopted as a method of periodically checking that all the various devices in the system are functioning correctly.

⚠ Testing of the entire system must be performed by qualified and experienced personnel who must establish which tests to conduct on the basis of the risks involved, and verify the compliance of the system with applicable regulations, legislation and standards, in particular with all the provisions of EN standard 12445 which establishes the test methods for automation systems for gates

5.1) Testing

Each component of the system, e.g. safety edges, photocells, emergency stop, etc. requires a specific testing phase. We therefore recommend observing the procedures shown in the relative instruction manuals.

To test ROAD200 proceed as follows:

1. Ensure that the instructions outlined in this manual and in particular in chapter 1 "WARNINGS" have been observed in full;
2. Using the control or stop devices (key-operated selector switch, control buttons or radio transmitter) test the opening, closing and stopping of the gate and make sure that the leaves move in the intended direction.
3. Check the proper operation of all the safety devices, one by one (photocells, sensitive edges, emergency stop, etc.). In particular, each time a device is activated the “OK” LED on the control unit flashes 2 times quickly, confirming that the control unit recognizes the event.
4. To check the photocells and make sure that there is no interference with other devices, pass a 5 cm diameter, 30 cm long cylinder on the optical axis, first near TX, then near RX and finally at the mid-point between them and make sure that in all these

cases the device is triggered, switching from the active to the alarm status and vice-versa; finally, that it causes the intended action in the control unit, for example that it causes the reversal of the movement during the closing manoeuvre.

5. If the dangerous situations caused by the movement of the leaf have been safeguarded by limiting the force of impact, the user must measure the impact force according to EN Standard 12445. If the adjustment of the “speed” and control of the “motor force” are used to assist the system for the reduction of the impact force, try to find the adjustment that gives the best results.

5.2) Commissioning

Commissioning can take place only after all the testing phases of ROAD200 and the other devices have been terminated successfully. It is not permissible to execute partial commissioning or to enable use of the system in makeshift conditions.

1. Prepare and store for at least 10 years the technical documentation for the automation, which must include at least: assembly drawing of the automation, wiring diagram, analysis of hazards and solutions adopted, manufacturer's declaration of conformity of all the devices installed (for ROAD200 use the annexed CE declaration of conformity); copy of the instruction manual and maintenance schedule of the automation.
2. Post a label on the gate providing at least the following data: type of automation, name and address of manufacturer (person responsible for the "commissioning"), serial number, year of manufacture and "CE" marking.
3. Post a permanent label or sign near the gate detailing the operations for the release and manual manoeuvre.
4. Prepare the declaration of conformity of the automation system and deliver it to the owner.
5. Prepare the "Installation instructions and warnings" of the automation system and deliver it to the owner.
6. Prepare the maintenance schedule of the automation system and deliver it to the owner; it must provide all directions regarding the maintenance of the single automation devices.
7. Before commissioning the automation system inform the owner in writing regarding dangers and hazards that are still existing (e.g. in the "Installation instructions and warnings").

6) Maintenance and Disposal

This chapter provides information about how to draw up a maintenance schedule, and the disposal of ROAD200.

6.1) Maintenance

The automation must be subjected to maintenance work on a regular basis, in order to guarantee it lasts.

⚠ The maintenance operations must be performed in strict compliance with the safety directions provided in this manual and according to the applicable legislation and standards.

If other devices different from the ROAD200 are present, follow the directions provided in the corresponding maintenance schedule.

1. ROAD200 requires scheduled maintenance work every 6 months or 10,000 manoeuvres (max.) after previous maintenance:
2. Disconnect the power supply (and buffer batteries, if featured)

3. Check for any deterioration of the components which form the automation, paying particular attention to erosion or oxidation of the structural parts. Replace any parts which are below the required standard.
4. Check the wear and tear on the moving parts: pinion, rack and the leaf components; if necessary replace them.
5. Connect the electric power sources up again, and carry out the testing and checks provided for in Paragraph "5.1 Testing".

6.2) Disposal

ROAD is constructed of various types of materials, some of which can be recycled: steel, aluminium, plastic, electric cables; while others must be disposed of (batteries and electronic boards).

⚠ Some electronic components and the batteries may contain polluting substances; do not pollute the environment. Enquire about the recycling or disposal systems available in compliance with regulations locally in force.

1. Disconnect the power supply of the automation system (and the buffer battery, if featured).
2. Disassemble all the devices and accessories, following in reverse order the procedures described in chapter 3 "Installation".
3. Wherever possible, separate any parts which can or must be recycled or disposed of in different ways, e.g. metal parts must be disposed of separately from plastic ones, as must the electronic cards, batteries etc.
4. Sort the various materials and consign them to local licensed firms for recovery and disposal.

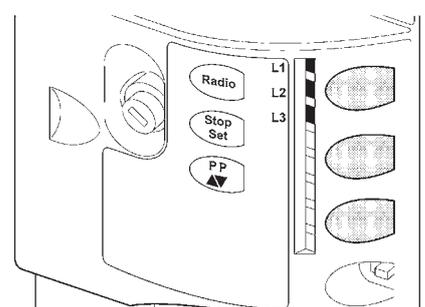
7) Additional information

Programming, personalisation and how to look for and deal with faults on the ROAD200 will be dealt with in this chapter.

7.1) Programming buttons

The ROAD200 control unit feature three buttons that can be used to command the control unit both during tests and programming.

RADIO	The radio transmitter to be used with ROAD200 can be memorized and cancelled with the "RADIO" button.
Stop SET	The "STOP" button enables the user to stop the manoeuvre. If pressed down for more than 5 seconds it enables the user to enter programming.
PP ▲▼	button enables the user to control the opening and closing of the gate or move the programming point upwards or downwards



7.2) Programming

A number of programmable functions are available on the ROAD200 control unit. The functions are adjusted using 2 buttons set on the control unit: **[▲▼]** and **[Set]** and are used by means of 3 LEDs: L1, L2, L3.

The programmable functions available on ROAD200 are set out on 2 levels:

Level one: the functions can be adjusted in modes ON-OFF (active or inactive). In this case, each of the LEDs **L2**...**L3** indicates a function.

If the LED is on, the function is active, if off the function is inactive. See Table 12. The radio status is displayed by the **L1** LED which is used for the second level function only.

Level two: the parameters can be adjusted on a scale of values (from 1 to 3). In this case, each of the LEDs **L1**, **L2**, **L3** indicates the value set (there are 3 possible settings). Please refer to Table 15.

7.2.1) Level one functions (ON-OFF functions).

Table 13: programmable function list: Level one:

LED	Function	Description
L1	---	---
L2	Motor speed	This function permits the speed of the motor to be selected between two levels, "fast", "slow". If the function is deactivated the speed is set on "slow".
L3	Automatic Closing	This function causes the door to close automatically after the programmed time has lapsed. The factory set Pause Time is 30 seconds, but can be changed to 15 or 60 seconds (see Table 15). If the function is inactive, functioning will be "semi-automatic".

During the normal functioning of ROAD200, LEDs **L2** and **L3** will either be on or off depending on the state of the function they represent. For example, L3 will be on if the "Automatic Closing" function is active.

7.2.2) Level one programming (ON-OFF functions).

Level 1 functions are all factory set to "OFF". However, they can be changed at any time as shown in Table 14. Follow the procedure carefully, as there is a maximum time of 10 seconds between pressing one button and another. If a longer period of time lapses, the procedure will finish automatically and memorize the modifications made up to that stage.

Table 14: changing ON-OFF functions

	Example
1. Press the button [Set] and hold it down (approx. 3 s)	
2. Release the [Set] button when L1 LED starts flashing	
3. Press button [▲▼] to move the flashing LED onto the LED representing the function which is to be changed.	
4. Press the [Set] button to change the state of the function (short flashing = OFF; long flashing = ON)	
5. Wait 10 seconds before leaving the programme to allow the maximum time to lapse.	

Note: Points 3 and 4 can be repeated during the same programming phases in order to set other functions to ON or OFF.

7.2.3) Level two functions (adjustable parameters)

Table 15: programmable function list: level two

Input LED	Parameter	LED (level)	value	Description
L1	Motor force	L1	Low	Adjust the sensibility of the motor force control to suit the type of gate. The "High" adjustment is more suitable for heavier and larger doors.
		L2	Medium	
		L3	High	
L2	Step-by-step Function	L1	Open - stop - close - open	Manages the sequence of controls associated to the Step-by-Step input or to the 1st radio command (see tables 4 and 5).
		L2	Open - stop - close - stop	
		L3	Condominium operation	
L3	Pause Time	L1	15 seconds	Adjusts the pause time, namely the time which lapses before automatic closure. This will only have an effect if automatic closing is active.
		L2	30 seconds	
		L3	60 seconds	

Note: "■" represents the factory setting.

All the parameters can be adjusted as required without any contraindication; only the adjustment of the "motor force" could require special care:

- Do not use high force values to compensate for points of abnormal friction on the leaf. Excessive force can compromise the operation of the safety system or damage the leaf.
- If the "motor force" control is used to assist the impact force reduction system, measure the force again after each adjustment in compliance with EN standard 12445.
- Wear and weather conditions may affect the movement of the gate, therefore periodic re-adjustments may be necessary.

7.2.4 Level two programming (adjustable parameters)

The adjustable parameters are factory set as shown in table 15, with: "█". However, they can be changed at any time as shown in Table 16. Follow the procedure carefully, as there is a maximum time of 10 seconds between pressing one button and another. If a longer period of time lapses, the procedure will finish automatically and memorize the modifications made up to that stage.

Table 16: changing the adjustable parameters	Example
1. Press the button [Set] and hold it down (approx. 3 s)	 3s
2. Release the [Set] button when L1 LED starts flashing	
3. Press button [▲▼] to move the flashing LED onto the input LED representing the parameter which is to be changed.	
4. Press the button [Set] and hold it down during step 5 and 6	
5. Wait approx. 3 seconds, after which the LED representing the current level of the parameter which is to be modified will light up.	
6. Press button [▲▼] to move the LED representing the parameter value	
7. Release the button [Set]	
8. Wait 10 seconds before leaving the programme to allow the maximum time to lapse.	 10s

Note: Points 3 to 7 can be repeated during the same programming phase in order to set other parameters

7.2.5 Level one programming example (ON-OFF functions).

The sequence to follow in order to change the factory settings of the functions for activating "High Speed" (L2) and "Automatic Closing" (L3) have been included as examples.

Table 17: Level one programming example	Example
1. Press the button [Set] and hold it down (approx. 3 s)	 3s
2. Release the [Set] button when L1 LED starts flashing	
3. Press the [▲▼] button once to move the flashing LED to LED L2.	
4. Press the [Set] button once to change the state of the function associated with L2 (Motor Speed). LED L2 will now flash with long flashes.	
5. Press the [▲▼] button once to move the flashing LED to LED L3	
6. Press the [Set] button once to change the state of the function associated with L3 (Automatic Closing). LED L3 will now flash with long flashes.	
7. Wait 10 seconds before leaving the programme to allow the maximum time to lapse.	 10s

Once these operations have been completed, LEDs L2 and L3 must remain on to indicate that the "High Motor Speed" and "Automatic Closing" functions are active.

7.2.6) Level two programming example (adjustable parameters)

The sequence to follow in order to change the factory settings of the parameters adjusting the “Motor Force” on the average (input on L1 and L2 levels) increasing the “Pause Time” to 60 seconds (input on L3 and level on L3), and have been included as examples.)

Table 18: Level two programming example	Example
1. Press the button [Set] and hold it down (approx. 3 s)	 3s
2. Release the [Set] button when L1 LED starts flashing	 L1 
3. Press the button [Set] and hold it down during step 4 and 5	
4. Wait approx. 3 seconds until LED L3, representing the current level of the “Motor Force” will light up.	 L3 3s
5. Press the [▲▼] button twice to move the LED which is lit to LED L2, which represents the new “Motor Force” value.	   L2
6. Release the button [Set]	
7. Press the [▲▼] button twice to move the flashing LED to LED L3.	   L3
8. Press the button [Set] and hold it down during step 9 and 10	
9. Wait approx. 3 seconds until LED L2, representing the current level of the “Pause Time” will light up.	 L2 3s
10. Press the [▲▼] button once to move the LED which is lit to LED L3, which represents the new “Pause Time” value.	  L3
11. Release the button [Set]	
12. Wait 10 seconds before leaving the programme to allow the maximum time to lapse.	 10s

7.3) Adding or removing devices

Devices can be added to or removed from the ROAD200 automation system at any time. In particular, various devices types can be connected to “STOP” input as explained in paragraphs “7.3.1 STOP Input”.

7.3.1) STOP input

STOP is the input that causes the immediate interruption of the manoeuvre (with a short reverse run). Devices with output featuring normally open “NO” contacts and devices with normally closed “NC” contacts, as well as devices with 8,2KΩ constant resistance output, like sensitive edges, can be connected to this input.

During the recognition stage the control unit recognizes the type of device connected to the STOP input (see paragraph 4.3 “Recognition Length of the Leaf”); subsequently it commands a STOP whenever a change occurs in the recognized status.

Multiple devices, even of different type, can be connected to the STOP input if suitable arrangements are made.

- Any number of NO devices can be connected to each other in parallel.
- Any number of NC devices can be connected to each other in series.
- Several devices with 8.2KΩ constant resistance output can be connected “in cascade” with a single 8.2KΩ termination resistance.
- It is possible to combine Normally Open and Normally Closed by making 2 contacts in parallel with the warning to place an 8.2KΩ resistance in series with the Normally Closed contact (this also makes it possible to combine 3 devices: Normally Open, Normally Closed and 8.2KΩ).

⚠ if the STOP input is used to connect devices with safety functions, only the devices with 8,2KΩ constant resistance output guarantee the fail-safe category 3 according to EN standard 954-1.

7.3.2) Photocells

The ROAD200 control unit is equipped with the "Phototest" function which increases the reliability of the safety devices, making it possible to achieve "category 2" in compliance with UNI EN 954-1 (edition 12/1998), in relation to the combination of control unit and safety photocells.

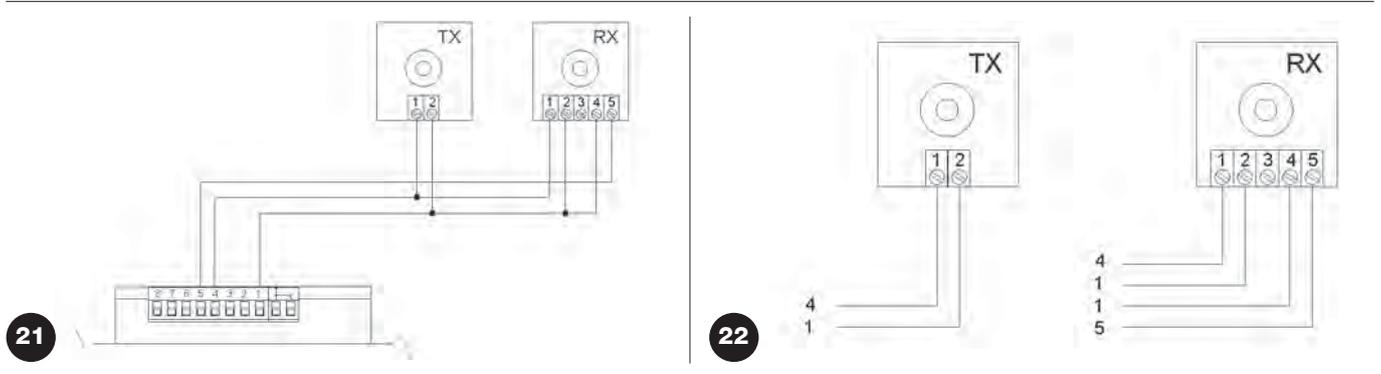
Every time a manoeuvre is activated the related safety device is controlled and only if everything is correct is the manoeuvre started.

Whereas, if the test has a negative outcome (photocell blinded by the sun, short circuited cable etc), the fault is identified and the manoeuvre is not performed.

To add a pair of photocells, make the following connections.

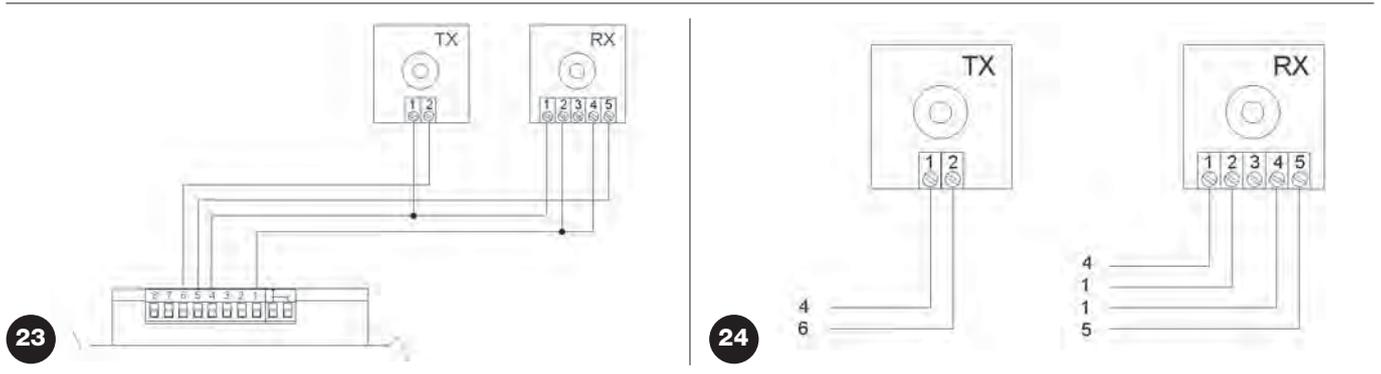
• **Connection without "Phototest" function (fig. 21 - 22):**

Power the receiver directly from the control unit services output (terminals 1 - 4).



• **Connection with "Phototest" function (fig. 23 - 24):**

The photocell transmitter power supply is not taken directly from the services but through terminals 6-4 of the "Phototest" output. The maximum usable current on the "Phototest" output is 100 mA.



Activate the synchronism as described in the photocell instructions if 2 pairs of photocells are used that could interfere with one another.

7.4) Special functions

7.4.1) "Always open" Function

The "Always open" function is a control unit feature which enables the user to control an opening manoeuvre when the "Step-by-Step" command lasts longer than 3 seconds. This is useful for connecting a timer contact to the "Step-by-Step" terminal in order to keep the

gate open for a certain length of time, for example. This feature is valid with any kind of "Step-by-Step" input programming. Please refer to the "Step-by-Step Function" parameter in Table 15.

7.4.2) "Move anyway" function

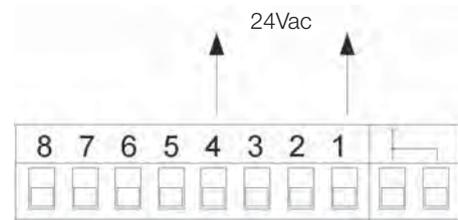
In the event that one of the safety devices is not functioning properly or is out of use, it is still possible to command and move the gate in "Man present" mode. Please refer to the Paragraph "Control with

safety devices out of order" in the enclosure "Instructions and Warnings for users of the ROAD gearmotor" for further information..

7.5) Connection of Other Devices

If the user needs to feed external devices such as a proximity reader for transponder cards or the illumination light of the key-operated selector switch, it is possible to tap power as shown in Figure 25. The power supply voltage is 24Vac -30% - +50% with a maximum available current of 100mA.

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7.6) Troubleshooting

The table 19 contains instructions to help you solve malfunctions or errors that may occur during the installation stage or in case of failure.

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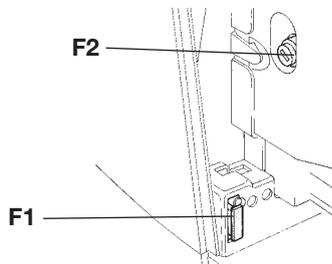


Table 19: Troubleshooting

Symptoms	Probable cause and possible solution
The radio transmitter does not control the door and the LED on the transmitter does not light up	Check to see if the transmitter batteries are exhausted, if necessary replace them.
The radio transmitter does not control the door and the LED on the transmitter lights up.	Check the transmitter has been memorised correctly in the radio receiver. Check the correct emission of the transmitter radio signals with the following empirical test: push the button and rest the LED against the aerial of a normal household radio (ideally inexpensive) that is switched on and tuned in at 108.5 Mhz FM or as close as possible; a low sound should be heard with crackling pulses.
No manoeuvre starts and the OK LED does not flash	Check that ROAD200 is powered by a 230V mains supply. Check to see if the fuses F1 and F2 are blown; if necessary, identify the reason for the failure and then replace the fuses with others having the same current rating and characteristics.
No manoeuvre starts and the flashing light is off	Make sure that the command is actually received. If the command reaches the "Step-by-Step" input the OK LED flashes twice indicating that the command has been received.
No manoeuvre starts and the flashing light flashes a few times	Count the flashes and check the corresponding value in table 20.
The manoeuvre starts but it is immediately followed by a reverse run	The selected force could be too low for this type of door. Check to see whether there are any obstacles; if necessary increase the force.

7.7) Diagnostics and signals

A few devices issue special signals that allow you to recognize the operating status or possible malfunctions.

7.7.1) Flashing light signalling

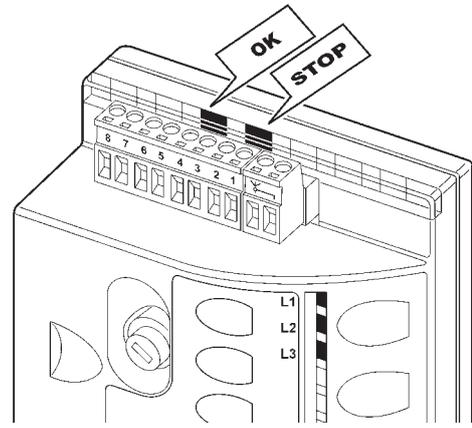
During the manoeuvre the flashing light flashes once every second. When something is wrong the flashes are more frequent; the light flashes twice with a 1 second pause between flashes..

Table 20: FLASH flashing light signalling

Quick flashes	Cause	ACTION
2 flashes 1 second's pause 2 flashes	Triggering of a photocell	At the starting of the manoeuvre, one or more photocells do not enable it; check to see if there are any obstacles. This is normal when there is an obstacle impeding the movement.
3 flashes 1 second's pause 3 flashes	Activation of the "motor force" limiting device	During the movement, the door experienced excessive friction; identify the cause.
4 flashes 1 second's pause 4 flashes	Activation of the STOP input	At the starting of the manoeuvre or during the movement ,the STOP input was activated; identify the cause
5 flashes 1 second's pause 5 flashes	Error in the internal parameters of the electronic control unit	Wait at least 30 seconds, then try giving a command. If nothing happens there may be a serious fault and the electronic card will have to be replaced.
6 flashes 1 second's pause 6 flashes	The maximum manoeuvre limit/hour has been exceeded	Wait for a few minutes until the manoeuvre limiting device drops to under the maximum limit.
7 flashes 1 second's pause 7 flashes	There is an error in the internal electric circuits	Disconnect all the power circuits for a few seconds and then try to give the command again. If nothing happens there may be a serious electronic card or motor cabling fault. Carry out a control and possible replacement.

7.7.2) Signals on the control unit

On the ROAD200 control unit there is a set of LED each of which can give special indications both during normal operation and in case of malfunctions.



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Table 21: LED's on the control unit's terminals

LED OK	Cause	ACTION
Off	Malfunction	Make sure there is power supply; check to see if the fuses are blown; if necessary, identify the reason for the failure and then replace the fuses with others having the same characteristics.
On	Serious malfunction	There is a serious malfunction; try switching off the control unit for a few seconds; if the condition continues it means there is a malfunction and the electronic board has to be replaced.
One flash every second	Everything OK	Normal operation of control unit
2 quick flashes	The status of the inputs has changed	This is normal when there is a change in one of the inputs: SEP-BY-STOP, STOP, triggering of photocells or the radio transmitter is used.
Series of flashes separated by a second's pause	Miscellaneous	It corresponds to the flashing light's signal. See Table 20.
LED OK	Cause	ACTION
Off	Activation of the STOP input	Check the devices connected to the STOP input
On	Everything OK	STOP Input active

Table 22: LED's on the control unit's buttons

L1 LED	Description
Off	Correct during normal operation.
On	Lit for 10 seconds means that the transmitter memorisation is being performed.
It flashes	<ul style="list-style-type: none"> Function programming in progress. Radio transmitter cancellation or diagnostics..
L2 LED	Description
Off	Indicates slow "motor speed" during normal operation.
On	Indicates fast "motor speed" during normal operation.
It flashes	<ul style="list-style-type: none"> Function programming in progress. If it flashes together with L3, it means that it the user must carry out the door opening and closing positions recognition phase (refer to Paragraph "4.3 Recognition length of the leaf").
L3 LED	Description
Off	Indicates "Automatic Closing" is active during normal operation
On	During normal operation the device indicates "Automatic Closing" is not active.
It flashes	<ul style="list-style-type: none"> Function programming in progress. If it flashes together with L2, it means that it the user must carry out the door opening and closing positions recognition phase (refer to Paragraph "4.3 Recognition length of the leaf")

7.8) Accessories

For information on the complete range of accessories, refer to the Nice s.p.a. product catalogue.

8) Technical characteristics

Nice S.p.a., in order to improve its products, reserves the right to modify their technical characteristics at any time without prior notice. In any case, the manufacturer guarantees their functionality and fitness for the intended purposes. All the technical characteristics refer to a room temperature of 20°C (±5°C).

Technical characteristics: ROAD200	
Type	Electromechanical gearmotor for the automatic movement of residential sliding gates including electronic control unit.
Pinion	Z: 15; Module: 4; Pitch: 12.5 mm; Pitch diameter: 60mm
Peak thrust	6Nm; corresponds to the ability to start a leaf with a static friction of max. 200N moving.
Nominal torque	3.3Nm; corresponds to the ability to keep a leaf with a dynamic friction of max. 110N moving
Idling speed	0.26m/s; the control unit allows 2 speeds to be programmed, equal to: 0.14m/s or 0.26m/s
Nominal torque speed	0.18m/s
Maximum frequency of operating cycles	30 cycles per day (the control unit allows up to the maximum described in tables 1 and 2)
Maximum continuous operating time	7 minutes (the control unit limits the continuous operation up to the maximum described in tables 1 and 2)
Operating limits	In general, ROAD200 is suitable for the automation of gates featuring leaves up to 5 m wide and weighing up to 200 kg, as shown in Tables 1 and 2.
ROAD200 Power supply	230Vac (+10% +15%) 50/60Hz.
ROAD200/V1 Power supply	120Vac (+10% +15%) 50/60Hz.
Max. absorbed power	150W (0.9A)
Insulation class	1 (a safety grounding system is required)
Flashing light output	For 1 LUCYB flashing light (12V, 21 W lamp)
STOP input	For normally open contacts, for 8.2Kohm constant resistance, or normally closed contacts; with self-recognition (any variation from the memorized status causes the 'STOP' command)
Step-by-step Input	For normally open contacts (the closing of the contact causes the "STEP-BY-STEP" command)
Radio AERIAL Input	52 ohm for RG58 or similar type of cable
Radio receiver	Incorporated
Programmable functions	2 ON-OFF functions and 3 adjustable functions (see tables 12 and 14)
Recognition functions	Recognition of the type of "STOP" device (Normally Open or Normally Closed contact or 8.2KΩ resistance). Recognition of the length of the gate and calculation of the slowdown and partial opening points.
Operating temperature	-20°C ÷ 50°C
Use in acid, saline or potentially explosive atmosphere	No
Protection class	IP 44
Dimensions and weight	330 x 195 h 277; 8Kg

Technical characteristics:	incorporated radio receiver
Type	4 channel transmitter for incorporated radio command
Frequency	433.92MHz
Coding	Digital fixed code with 12 Bit code, FLO type Digital Rolling code with 52 Bit code, FLOR type Digital Rolling code with 64 Bit code, SMILO type
Transmitter compatibility (1)	FLO, VERY VE FLOR, VERY VR; only single group: ERGO, PLANO, PLANOTIME SMILO
Transmitters memorized	Up to 160 if memorized in mode 1
Input impedance	52Ω
Sensitivity	better than 0.5μV
Range of the transmitters	From 100 to 150 m. The range can vary if there are obstacles or electromagnetic disturbances, and is affected by the position of the receiving aerial
Outputs	For commands as of table 4 and 5
Operating temperature	-20°C ÷ 55°C

Note 1: the first transmitter introduced also determines the type of transmitters that can be introduced afterwards

Technical characteristics:	transmitter: FLO2	transmitter: FLO2R-S	transmitter: SM2
Type	2 channel transmitter for radio command		
Frequency	433.92MHz		
Coding	Digital fixed code with 12 Bit code, FLO type	Digital Rolling code with 52 Bit code, FLOR type	Digital Rolling code with 64 Bit code, SMILO type
buttons	2		
Power supply	12Vdc with 23A battery		
Absorption	25mA		
Battery life	1 year, estimated on the basis of 20 commands/day, each lasting 1s at 20°C (at low temperatures the efficiency of the batteries decreases)		
Irradiated power	100µW		
Dimensions and weight	72 x 40 h 18mm; 30g	72 x 40 h 18mm; 30g	Diameter 48 h14mm / 19g
Protection class	IP40 (suitable for use indoors or in protected environments)		
Operating temperature	-40°C ÷ 85°C		

Instructions and Warnings for users of ROAD gearmotor

These instructions can be incorporated with the "Instructions and Warnings for the use of the automation" which the installer must give the owner of the automation, and must be incorporated by them.

GB

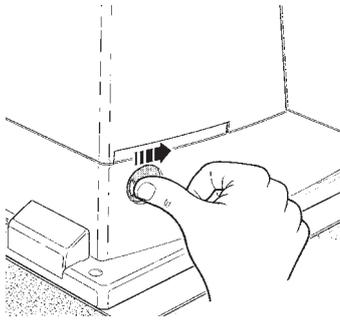
Congratulations for having chosen a Nice product for your automation system! Nice S.p.A. produces components for the automation of gates, doors, rolling gates, roller shutters and awnings: gearmotors, control units, radio controls, flashing lights, photocells and miscellaneous accessories. Nice uses only the finest materials and first-class workmanship. It focuses on the development of innovative solutions designed to simplify the use of its equipment, dedicating meticulous care to the study of its technical, aesthetic and ergonomic characteristics: From the wide range of Nice products, your installation technician will certainly have selected the one best suited to your specific requirements. However, Nice is not the producer of your automation system, which is rather the result of a combination of operations carried out by your installation technician, namely analysis, evaluation, selection of materials and system implementation. Each automation system is unique. Your installation technician is the only person who possesses the experience and professionalism needed to set up a system capable of satisfying your requirements, a system that is safe, reliable, long lasting and built in accordance with the regulations in force. An automation system is not only very convenient; it also improves the level of security in your home. Moreover, it will last for years with very little maintenance. Even though the automation system you possess meets the safety requirements of the legislation in force, this does not exclude the existence of a "residual risk", i.e. the possibility that dangers may arise, usually as a result of improper or unreasonable use. We have prepared the following list of do's and don'ts to help you avoid any mishaps:

- **Before using your automation system for the first time**, ask the installer to explain the origin of any residual risks; take a few minutes and read the **users instructions manual given you by the installer**. Retain the manual for future use and deliver it to any subsequent owner of the automation system.
- **Your automation system is a machine that will faithfully execute your commands**; unreasonable or improper use may generate dangers: do not operate the system if there are people, animals or objects within its range of operation.
- **Children**: automation systems are designed to guarantee high levels of safety and security. They are equipped with detection devices that prevent movement if people or objects are in the way, guaranteeing safe and reliable activation. However, children should not be allowed to play in the vicinity of automated systems; to prevent any accidental activations, keep all remote controls away from children: **they are not toys!**
- **Malfunctions**: If you notice that your automation is not functioning properly, disconnect the power supply to the system and operate the manual release device. Do not attempt to make any repairs; call the installation technician and, in the meantime, operate the system like a non-automatic gate after releasing the gearmotor as described below.
- **Maintenance**: Like any machine, your automation needs regular periodic maintenance to ensure its long life and total safety. Arrange a periodic maintenance schedule with your installation technician. Nice recommends that maintenance checks be carried out every six months for normal domestic use, but this interval may vary depending on the intensity of use. Only qualified personnel are authorized to carry out checks, maintenance operations and repairs.
- Do not modify the system or its programming and adjustment parameters in any way, even if you feel capable of doing it: your installation technician is responsible for the system.
- The final test, the periodic maintenance operations and any repairs must be documented by the person who has performed them; these documents must remain under the custody of the owner of the system.
The only recommended maintenance operations that the user can perform periodically concern the cleaning of the photocell glasses and the removal of leaves and debris that may impede the automation. To prevent anyone from activating the gate **release the automation system** (as described below). Use a slightly damp cloth to clean.
- **Disposal**: At the end of its useful life, the automation must be dismantled by qualified personnel, and the materials must be recycled or disposed of in compliance with the legislation locally in force.
- **In the event of malfunctions or power failures**. While you are waiting for the technician to come (or for the power to be restored if your system is not equipped with buffer batteries), you can operate the system like any non-automatic gate. In order to do this you need to manually release the gearmotor (this operation is the only one that the user of the automation is authorized to perform): This operation has been carefully designed by Nice to make it extremely easy, without any need for tools or physical exertion.

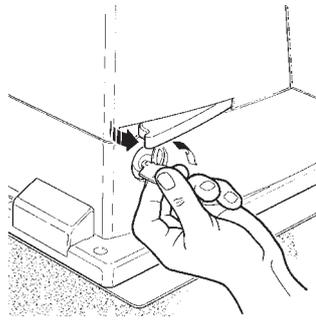


Manual movement and release: before carrying out this operation please note that release can only occur when the leaf is stopped.

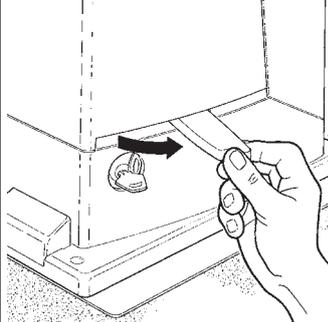
1 Slide the lock cover disc



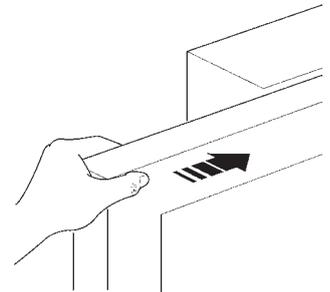
2 Insert and turn the key clockwise



3 Pull the release handle



4 Move the leaf manually



To lock: carry out the same procedures backwards.

Control with safety devices out of order: If the safety devices are malfunctioning, it is still possible to control the gate.

- Operate the gate control device (remote control or key-operated selector switch etc.). If the safety devices enable the operation, the gate will open and close normally, otherwise the flashing light flashes a few times but the manoeuvre does not start (the number of flashes depends on the reason why the manoeuvre is not enabled).
- In this case, **actuate** the control again within 3 seconds and **keep it actuated**.
- After approximately 2 s the gate will start moving in the “man present” mode, i.e. so long as the control is maintained the door will keep moving; as soon as the control is released the door will stop.

If the safety devices are out of order the automation must be repaired as soon as possible.

Replace the Remote Control Battery: if your radio control after a period of time, seems not to work as well, or not to work at all, it may simply be that the battery is flat (depending on the type of use, it may last from several months up to one year and more). In this case you will see that the light confirming the transmission is weak, or does not come on, or comes on only briefly. Before calling the installation technician try exchanging the battery with one from another operating transmitter: if the problem is caused by a low battery, just replace it with another of the same type.

Warning: The batteries contain polluting substances: do not dispose of them together with other waste but use the methods established by local regulations.

Are you satisfied? If you wish to install another automation system in your home, call your old installation technician and use Nice products. You will get the services of a specialist and the most advanced products available on the market, superior performances and maximum system compatibility.

Thank you for reading these instructions. We feel confident that you will be well satisfied with your new system: for any present or future requirements, please contact your reliable installation technician.

Dichiarazione di conformità Declaration of Conformity

Dichiarazione CE di conformità secondo Direttiva 98/37/CE, Allegato II, parte B (dichiarazione CE di conformità del fabbricante)
according to Directive 98/37/EC, Annex II, part B (CE declaration of conformity by manufacturer)

Numero 208/ROAD200 Revisione: 0
Number Revision

Il sottoscritto Lauro Buoro in qualità di Amministratore Delegato, dichiara sotto la propria responsabilità che il prodotto
The undersigned Lauro Buoro, managing director, declares under his sole responsibility that the following product:

Nome produttore: NICE s.p.a.
Manufacturer's name

Indirizzo Via Pezza Alta 13, 31046 Z.I. Rustignè, Oderzo (TV) Italia
Address

Tipo Motoriduttore elettromeccanico "ROAD200" con centrale incorporata
Type "ROAD200" electromechanical gearmotor with incorporated control unit

Modelli ROAD200
Models

Accessori: /
Accessories

Risulta conforme a quanto previsto dalle seguenti direttive comunitarie:
Satisfies the essential requirements of the following Directives

98/37/CE (ex 89/392/CEE) DIRETTIVA 98/37/CE DEL PARLAMENTO EUROPEO E DEL CONSIGLIO del 22 giugno 1998 concernente il ravvicinamento delle legislazioni degli Stati membri relative alle macchine
DIRECTIVE 98/37/CE COUNCIL of June 22, 1998, for the harmonisation of the legislations of member States regarding machines

Come previsto dalla direttiva 98/37/CE si avverte che non è consentita la messa in servizio del prodotto sopra indicato finché la macchina, in cui il prodotto è incorporato, non sia stata identificata e dichiarata conforme alla direttiva 98/37/CE.
As specified in the directive 98/37/CEE use of the product specified above is not admitted until the machine on which it is mounted has been identified and declared as conforming to the directive 98/37/CEE.

Inoltre il prodotto risulta conforme a quanto previsto dalle seguenti direttive comunitarie, così come modificate dalla Direttiva 93/68/CEE del consiglio del 22 Luglio 1993:
Furthermore, the product complies with the specifications of the following EC directives, as amended by the directive 93/68/CEE of the European Council of 22 July 1993:

73/23/CEE DIRETTIVA 73/23/CEE DEL CONSIGLIO del 19 febbraio 1973 concernente il riavvicinamento delle legislazioni degli Stati membri relative al materiale elettrico destinato ad essere adoperato entro taluni limiti di tensione
73/23/ EEC DIRECTIVE 73/23/EEC OF THE COUNCIL of February 19, 1973 for the harmonisation of the legislations of member States regarding electrical equipment designed to be used within certain voltage limits

89/336/CEE DIRETTIVA 89/336/CEE DEL CONSIGLIO del 3 maggio 1989, per il riavvicinamento delle legislazioni degli Stati membri relative alla compatibilità elettromagnetica
89/336/ EEC DIRECTIVE 89/336/EEC OF THE COUNCIL of May 3, 1989, for the harmonisation of the legislations of member States regarding electromagnetic compatibility

Inoltre risulta conforme ai requisiti essenziali richiesti dall'articolo 3 dalla seguente direttiva comunitaria, per l'uso al quale i prodotti sono destinati:
Furthermore, the product complies with the essential requisites specified in article 3 of the following EC directive, for the use the products have been manufactured for:

1999/5/CE; DIRETTIVA 1999/5/CE DEL PARLAMENTO EUROPEO E DEL CONSIGLIO del 9 marzo 1999 riguardante le apparecchiature radio e le apparecchiature terminali di telecomunicazione e il reciproco riconoscimento della loro conformità
1995/5/CE; DIRECTIVE 1999/5/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of March 9, 1999 concerning radio equipment and telecommunications terminal equipment and mutual recognition of their conformity.

Oderzo, 26 Ottobre 2004
Oderzo, 26 October 2004


Amministratore Delegato
Managing Director
Lauro Buoro



COMPANY
WITH QUALITY SYSTEM
CERTIFIED BY DNV
=ISO 9001/2000=

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