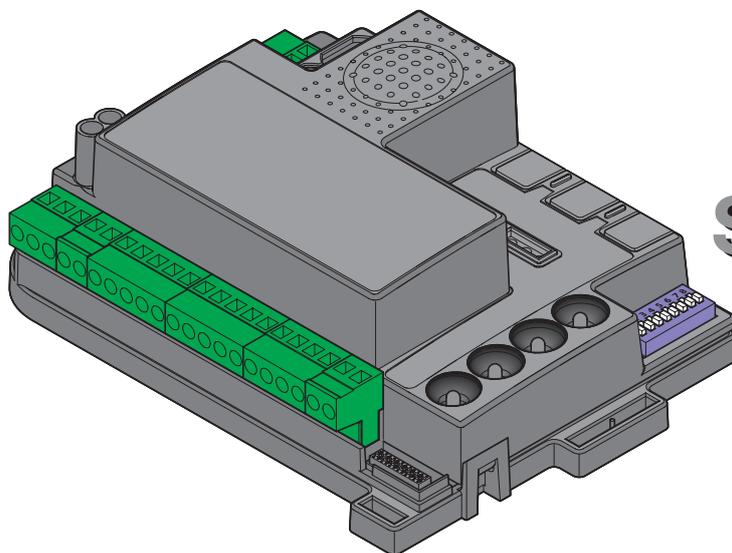


STARG8 24 - STARG8 AC

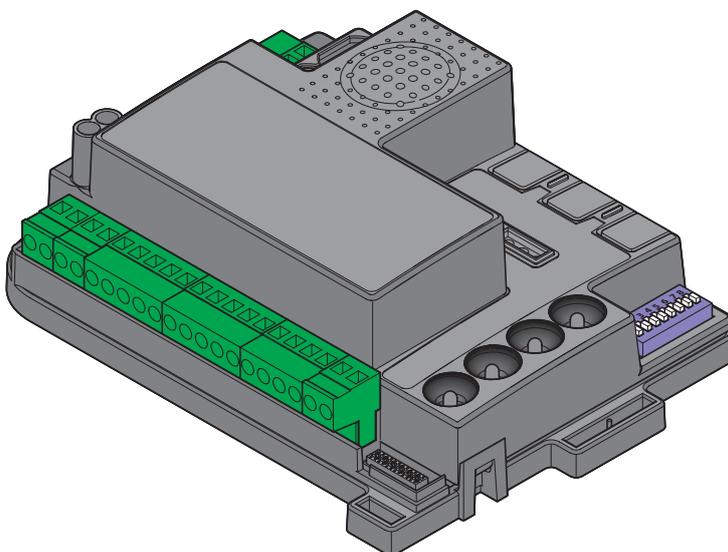
EN ADVANCED PROGRAMMING



STARG8 AC



STARG8 24



11. Index

The following programming sequences are not necessary for starting up the system, but are required for adjusting the advanced control unit settings.

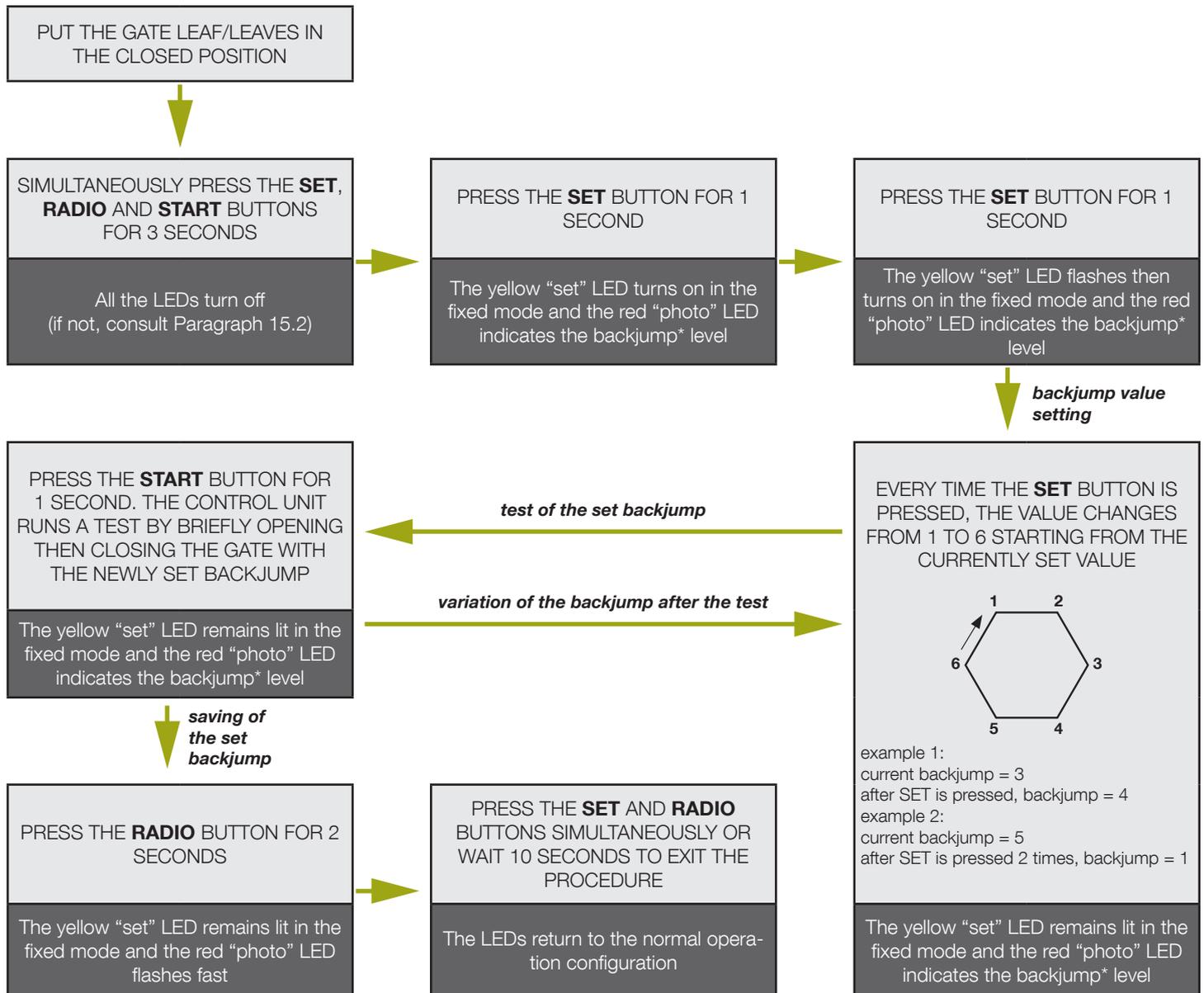
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12. Backjump adjustment

This procedure allows for adjusting or eliminating the backjump. It consists in inverting the gate movement at the end of the path to facilitate unlocking and to safeguard the mechanical system. On certain motors this is unnecessary, therefore the value is set to 1 by default.

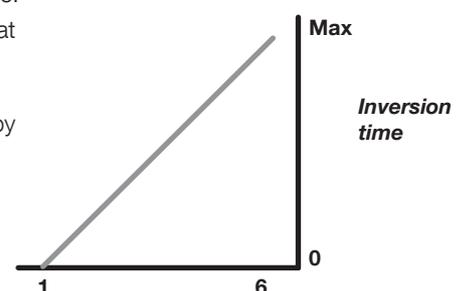
DEFAULT: Jet, Couper, Intro or Dynamos motors (see dip-switch 1 and 2 settings) backjump = value 1
 Minimodus motors (see dip-switch 1 and 2 settings) = value 2
 Modus motors (see dip-switch 1 and 2 settings) = value 3

⚠️ Prior to proceeding with this programming procedure, first verify whether either the “basic path programming” or the “advanced path programming” have been completed.



* The backjump value is indicated by the number of flashes of the series based on the set value. When the series consists of one flash, the backjump value is zero (no inversion of movement at end-of-path), when there are 6 flashes, the backjump is set to the maximum value. Clearly, the other series indicate growing intermediate values from 1 to 6. The backjump value can be known at any time after the SET button is pressed the first time, by counting the number of flashes of the red “photo” LED.

⚠️ If the backjump value is set too high, some undesired clearance may remain between the door and the mechanical stop.



13. AUX output programming

These programming sequences are not essential to the system's operation, though they allow for setting the type (lock or courtesy light), work mode and output voltage (12VDC or 24VDC) of the devices connected to the AUX output.

⚠ To interrupt the following programming sequences at any time, press the SET and RADIO buttons simultaneously or wait 10 seconds.

AUX USED AS COURTESY LIGHT

If the AUX output is used as courtesy light for controlling the lamps, a relay **must be connected**.

The light can be activated through a dedicated transmitter button (to be programmed as indicated in Paragraph 12.1) or associated with the wired or transmitter start button.

The default relay must be 12VDC-powered, or even 24VDC, by observing the programming procedure indicated in Paragraph 10.3.

ACTIVATION OF THE LIGHT THROUGH A DEDICATED TRANSMITTER BUTTON AND TIMER-BASED SWITCHING OFF:

- connect a **timer relay** and set the desired switch-on time for the light;
- set the AUX output on courtesy light (see Paragraph 10.2);
- set the monostable work mode (see Paragraph 12.3);
- programme the desired transmitter button for the light command (see Paragraph 12.1).

The light will switch on with the programmed transmitter and switch off after the time set on the relay elapses.

SWITCHING ON/OFF OF THE LIGHT THROUGH A DEDICATED TRANSMITTER BUTTON:

- connect a **monostable relay**;
- set the AUX output on courtesy light (see Paragraph 12.2);
- set the bistable work mode, ON/OFF (see Paragraph 12.3);
- programme the desired transmitter button for the light command (see Paragraph 12.1).

The light switches on/off whenever the programmed transmitter is pressed.

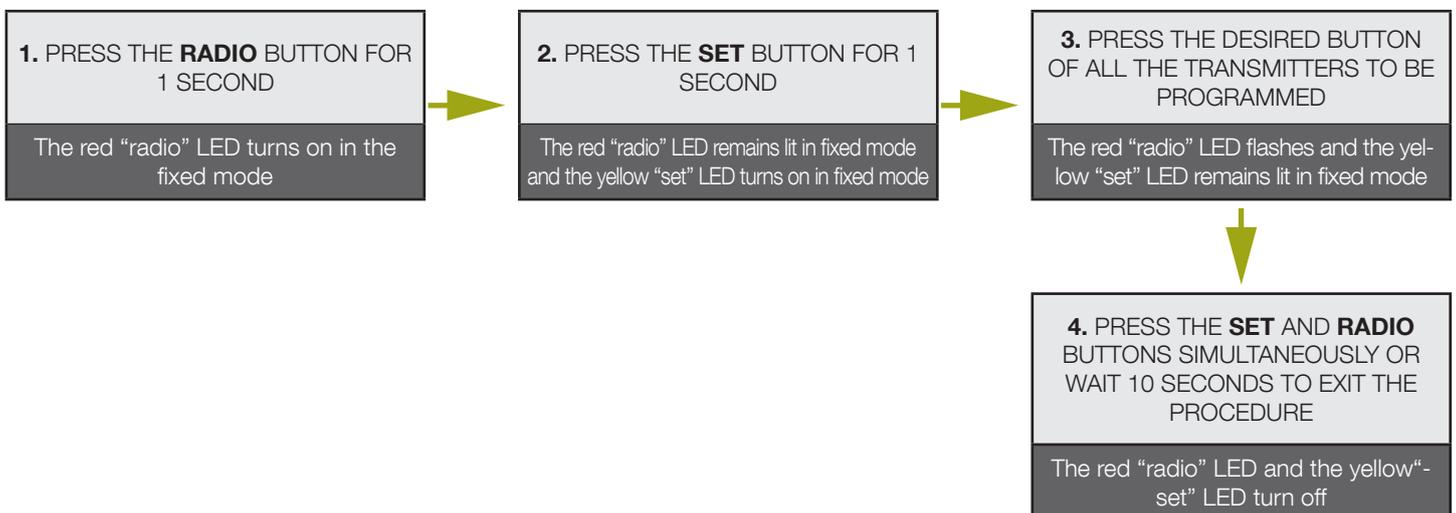
ACTIVATION OF THE COURTESY LIGHT LINKED TO THE WIRED OR TRANSMITTER START BUTTON:

- connect a **timer relay** and set the desired switch-on time for the light;
- set the AUX output as electric lock (see Paragraph 12.2);
- set the work mode as electric lock (see Paragraph 12.3);
- if desired, programme the transmitter button for the START command (see Paragraph 4.1).

At every wired or transmitter start command, the light will switch on for the set time.

13.1 - Programming of the button linked to the “AUX” output

This procedure allows for programming the button of the radio control linked to the “AUX” output (terminals 3-4). To use this function, the AUX output must be set to courtesy light – see Paragraph 12.2.



⚠ If, at the start of this procedure, the “set”, “radio” and “start” LEDs flash, it means that the programming protection has been activated – see Paragraph 15.2.

13.2 - Selection of device connected to “AUX” output

Default = electric lock

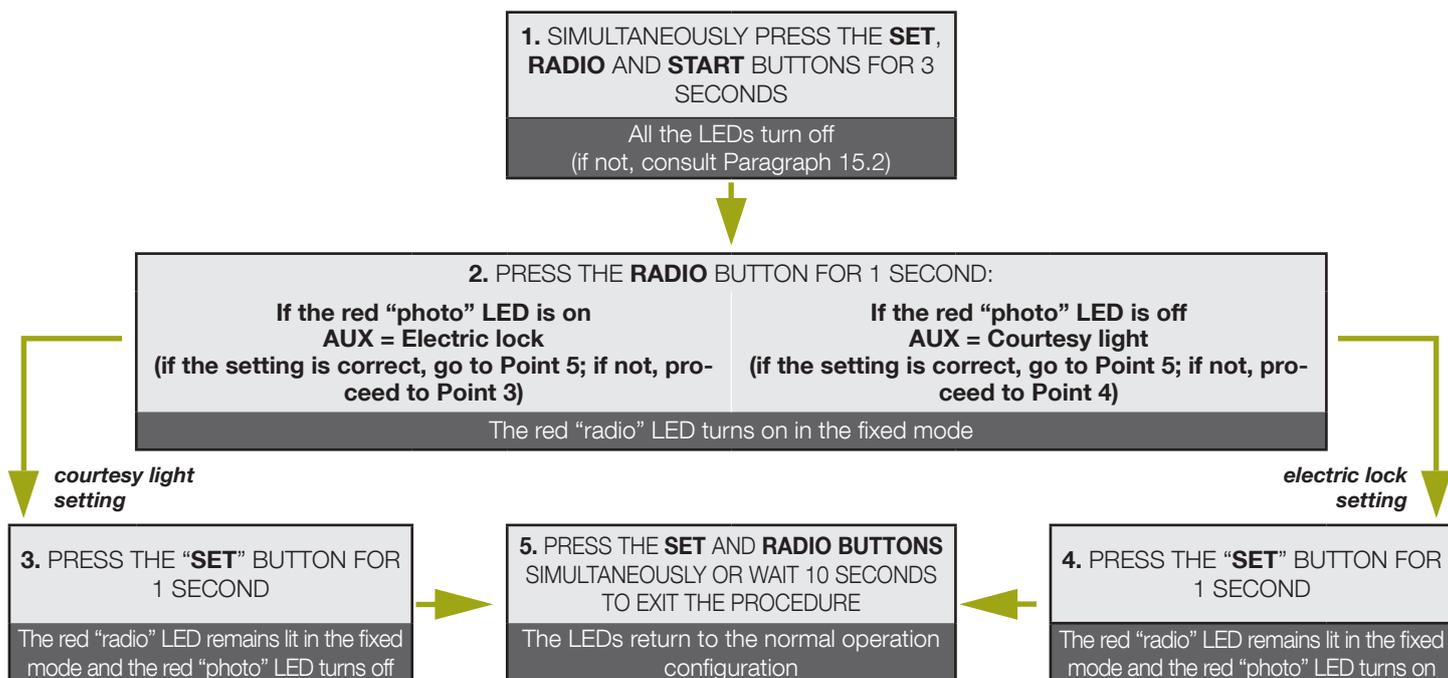
This procedure allows for setting the “AUX” output for the operation as:

ELECTRIC LOCK: the control unit closes the AUX contact (terminals 3-4) whenever a command is received.

By default the contact is closed for 2 seconds (electric lock mode). To change the work mode, see Paragraph 12.3.

COURTESY LIGHT: the control unit closes the AUX contact (terminal 3-4) whenever a radio command is received (the AUX button must be programmed – see Paragraph 12.1). By default the command is monostable. To change the work mode, see Paragraph 12.3.

⚠ To control the AUX output when it has been set as a courtesy light output, you need to register a transmitter by following the procedure in paragraph 12.1 and connect a suitable relay.



13.3 - Selection of “AUX” output operating mode

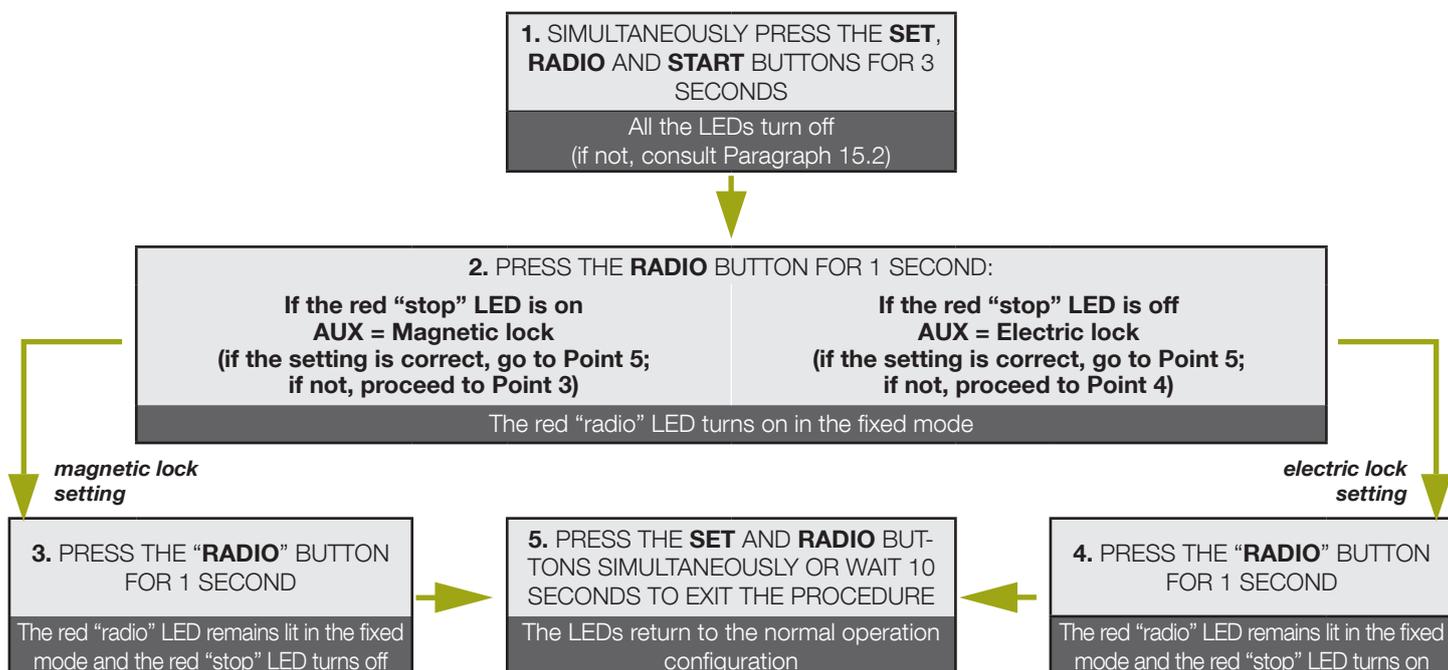
IF THE “AUX” OUTPUT IS SET AS LOCK (see Paragraph 12.2)

Default = electric lock

The work mode (i.e. how the contact behaves at every wired or radio START command) can be set as:

ELECTRIC LOCK: at every command, the control unit closes the contact for 2 seconds

MAGNETIC LOCK: the control unit closes the contact only when the automation is fully closed



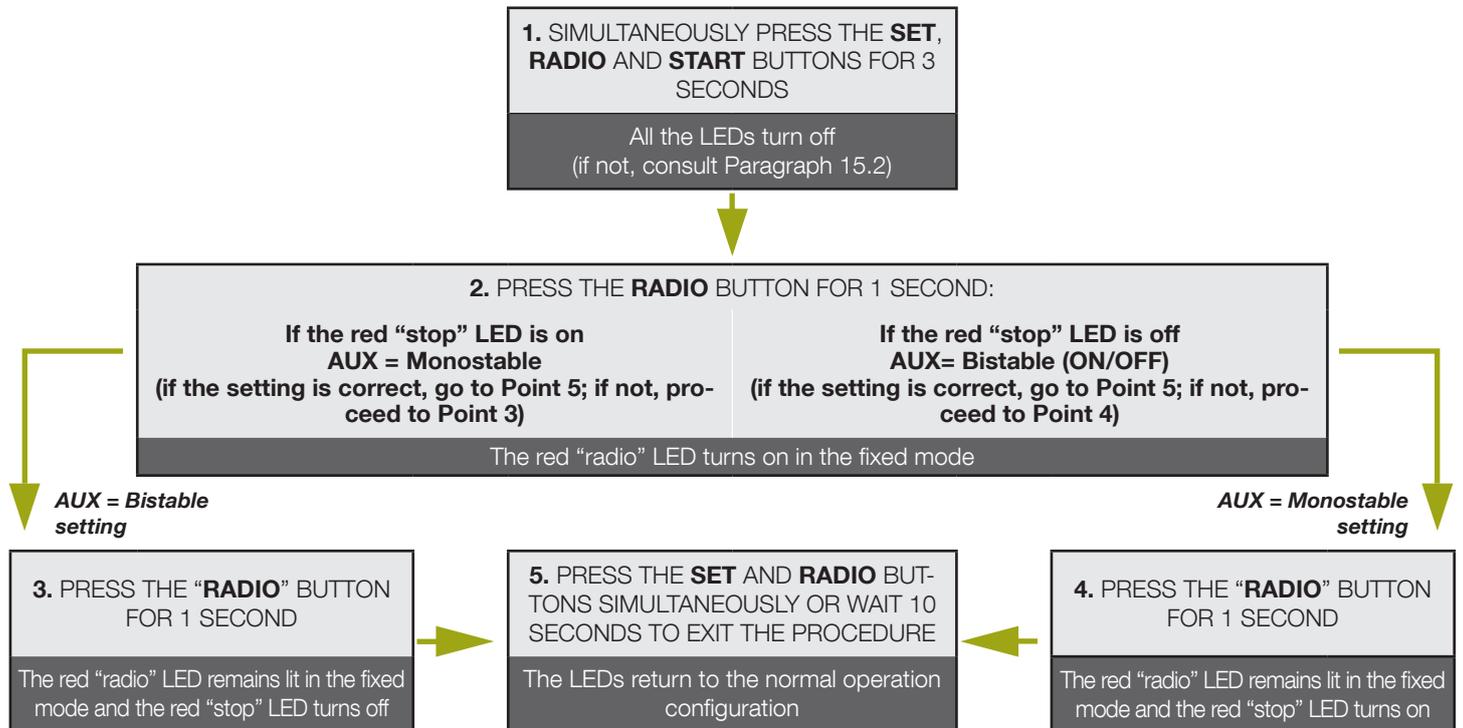
IF THE "AUX" OUTPUT IS SET AS COURTESY LIGHT (see Paragraph 12.2)

Default = monostable

When a command is received from a transmitter pulse, it is possible to set the AUX contact work mode as:

MONOSTABLE: after every radio command, the control unit closes the contact for 3 seconds.

BISTABLE, ON/OFF: after every radio command, the control unit changes the status from open to closed.

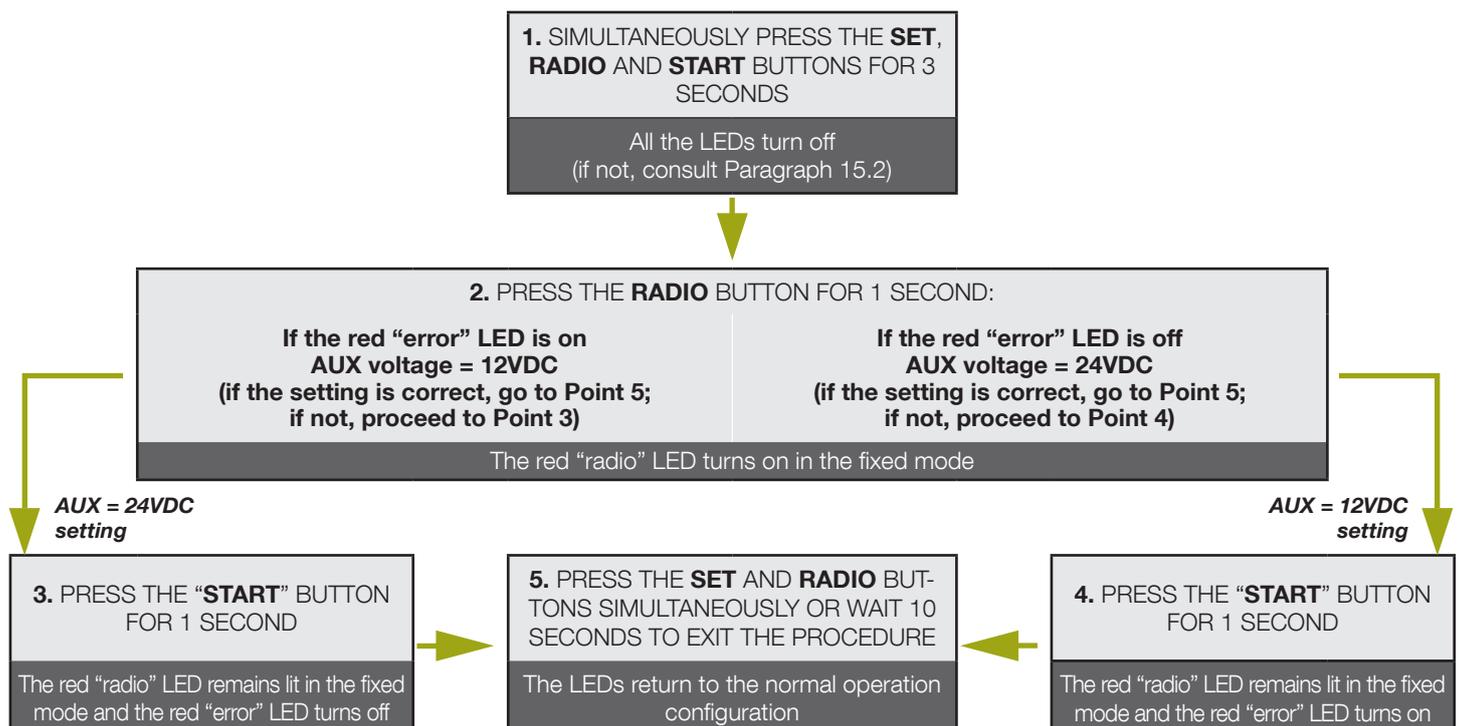


⚠ To control the AUX contact set as courtesy light, a radio command must be registered through the procedure indicated in Paragraph 12.1 and connect a suitable relay (see paragraph 12).

13.4 - Selection of "AUX" output voltage (only for STARG8 24)

Default = 12VDC

The output voltage of the AUX contact can be set to 12VDC or 24VDC, depending on the connected lock or the available relay.



14. Safety device advanced programming sequences

NE

These programming sequences are not essential to the system's operation, but they allow for controlling the safety devices by activating the photo-test—when photocells are installed—or controlling the resistance when 8.2kOhm resistive edges are mounted.

⚠ To interrupt the following programming sequences at any time, press the SET and RADIO buttons simultaneously or wait 10 seconds.

14.1 - Photo-test activation/deactivation

Default = deactivated

The photo-test is a check aimed at verifying whether the 24VDC-powered photocells function properly.

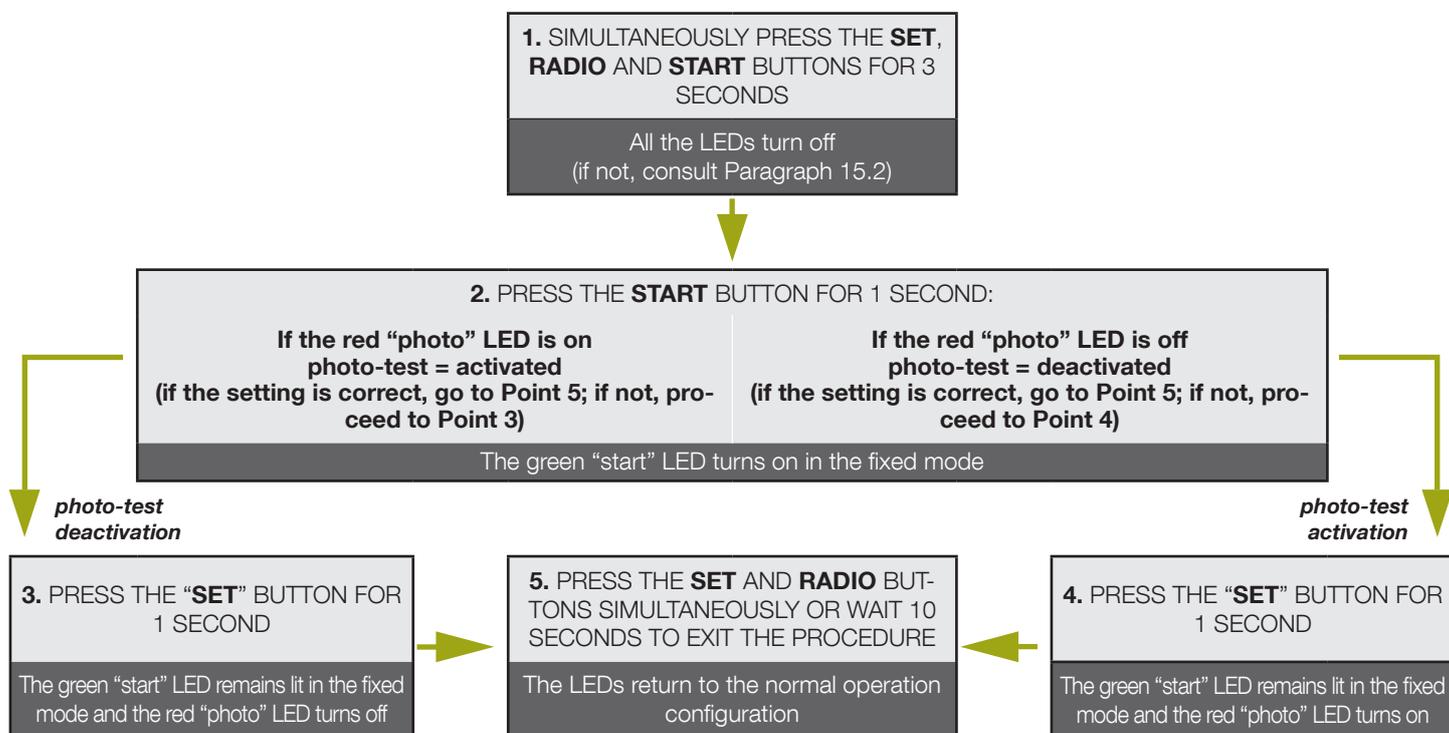
It consists in cutting off the power supply to the transmitter photocell (TX) from the control unit, while subsequently verifying that the contact (PHO1, or PHO1 and PHO2, depending on the settings in Paragraph 13.2) opens. Subsequently, the control unit restores the power supply to the transmitter photocell and verifies that the contact closes.

This occurs before each movement of the automation.

For the test to work, the photocells must be wired according to the following scheme:

+24V RX photocell = terminal 8

+24V TX photocell = terminal 9



⚠ The photo-test can only work with photocells powered at 24VDC.

⚠ By default the phototest function works on both contacts "PHO1" and "PHO2". To set this test only on the contact "PHO1", please see paragraph 13.2.

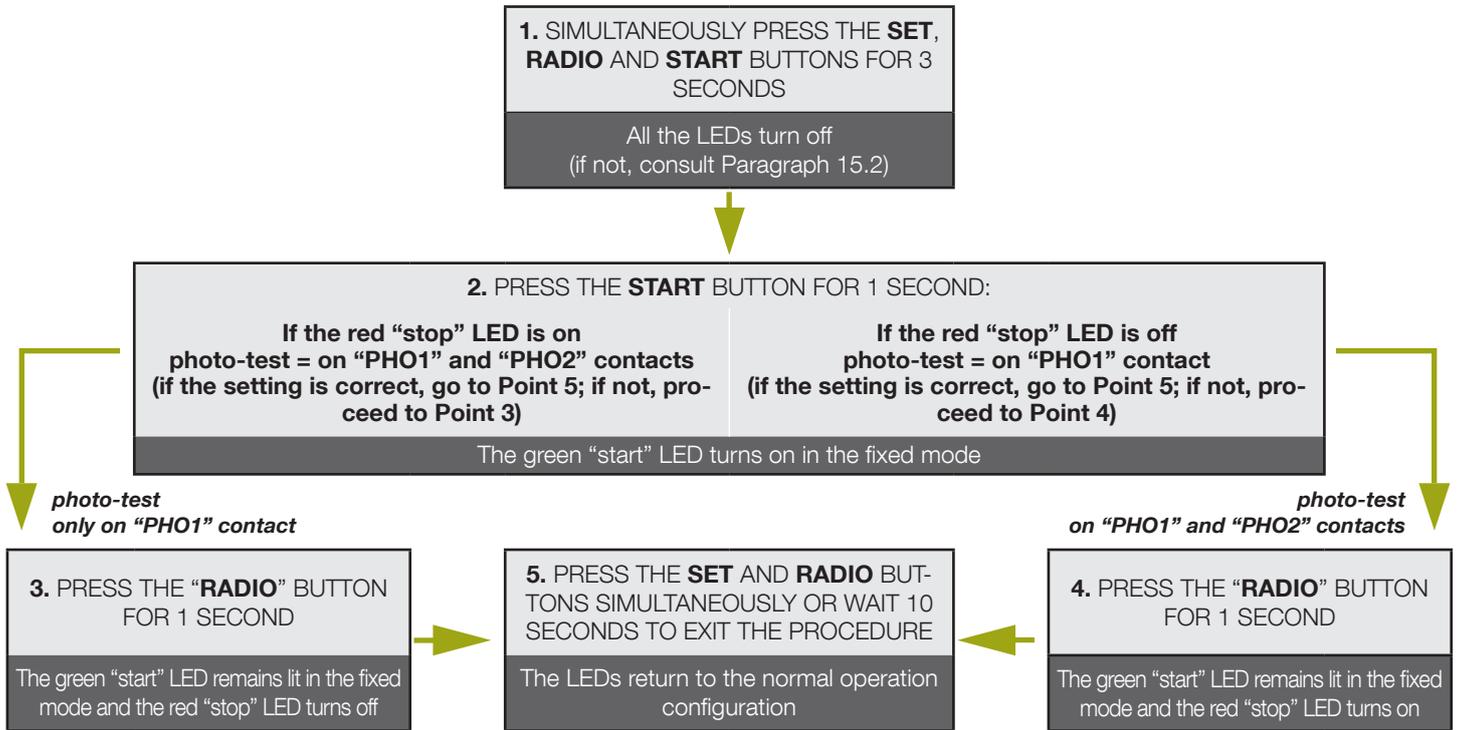
⚠ By enabling the photocells test, you will lose the "gate status indicator" function (GSI).

⚠ If "PHO2" is set as safety edge (DIP 5 OFF) the phototest will only be active on contact "PHO1".

14.2 - Selection of the outputs linked to the photo-test

Default = PHO1 and PHO2 contacts (terminals 5-6)

With this procedure, it is possible to decide on which safety devices to carry out the photo-test.



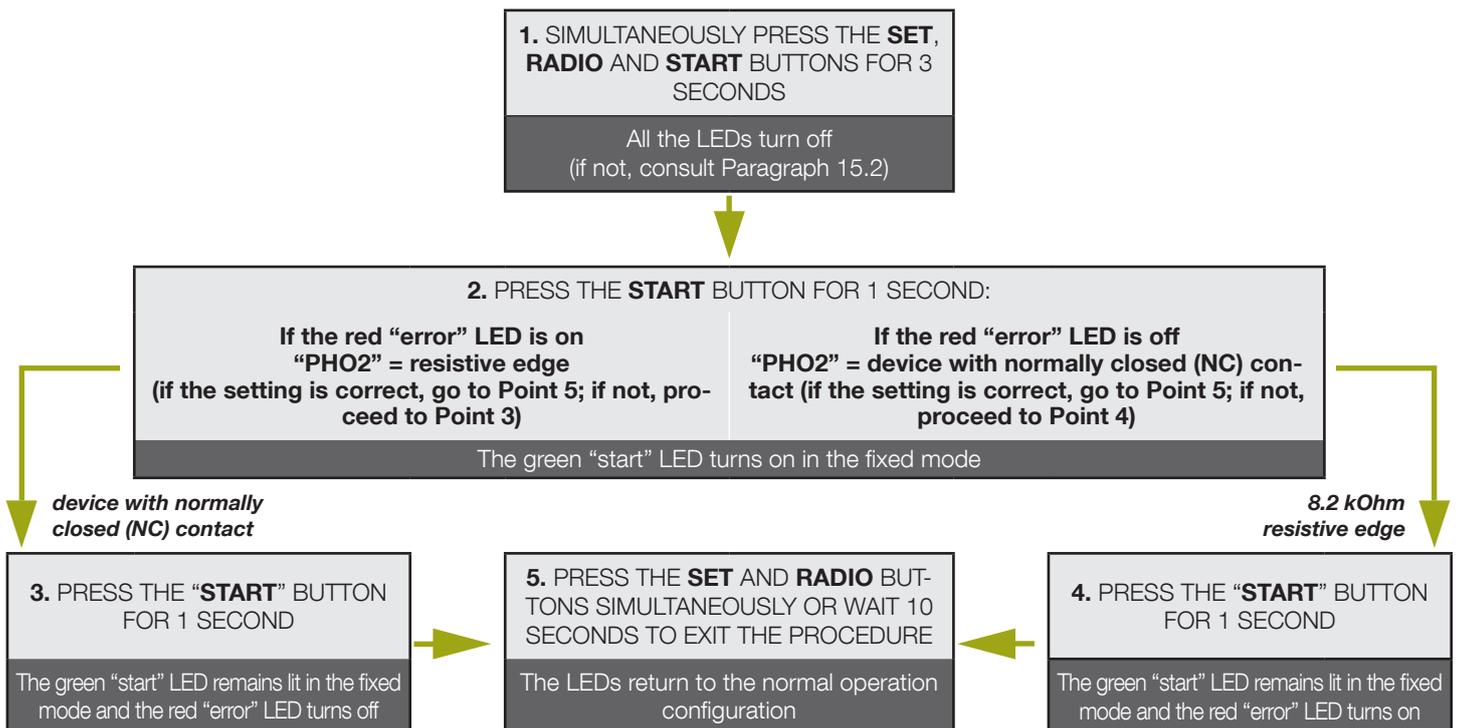
⚠ The photo-test can only work with photocells powered at 24VDC.

14.3 - Selection of the type of devices linked to "PHO2"

Default = "PHO2" set for devices with normally closed contact (terminal 6)

This procedure allows for setting the "PHO2" output for managing 8.2kOhm resistive edges.

The control unit constantly verifies the integrity of the edge by measuring the resistance between the two dedicated terminals.



⚠ In order to carry out the check on the safety devices, the connected edges must be of the resistive type with 8.2 kOhm.

15. Setting the wired commands

These programming sequences allow for locking wired commands, for managing the system solely with radio transmitters or for changing the operation of the wired commands to start and pedestrian.

⚠ If, at the start of the following procedures, the “set”, “radio” and “start” LEDs flash, it means that the programming protection has been activated – see Paragraph 15.2.

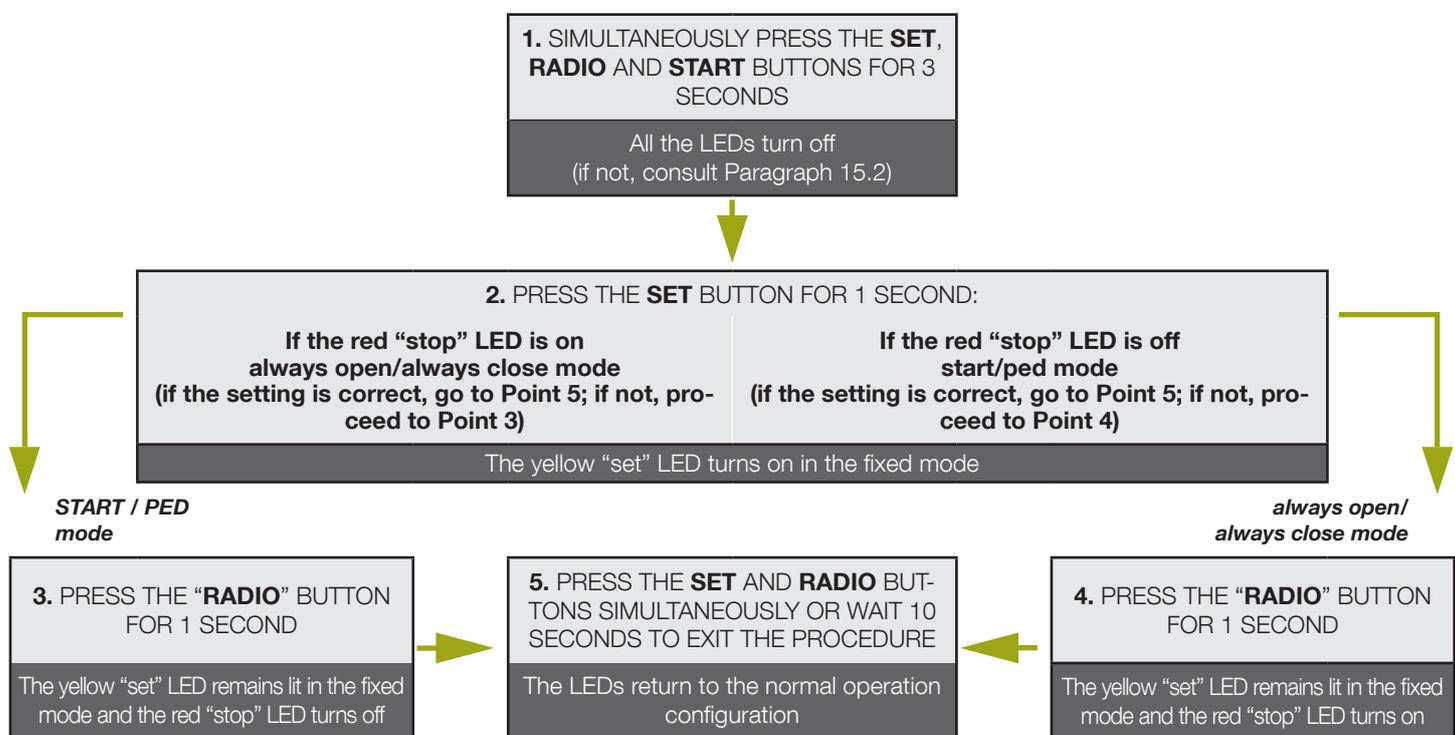
⚠ To interrupt the following programming sequences at any time, press the SET and RADIO buttons simultaneously or wait 10 seconds.

15.1 - Selecting the wired command modes

Default = “START” contact (terminal 15) linked to the “STEP” dip-switch (see Paragraph 3.1) and “PED” partial opening dip-switch (terminal 18). This programming sequence allows for linking the “START” and “PED” contacts to the following operating modes:

Open always/close always mode: the “START” contact always opens the automation, the “PED” contact always closes the automation

Start/ped mode: “START” contact settable with “STEP” dip-switch (see Paragraph 3.1), “PED” contact opens the automation partially.



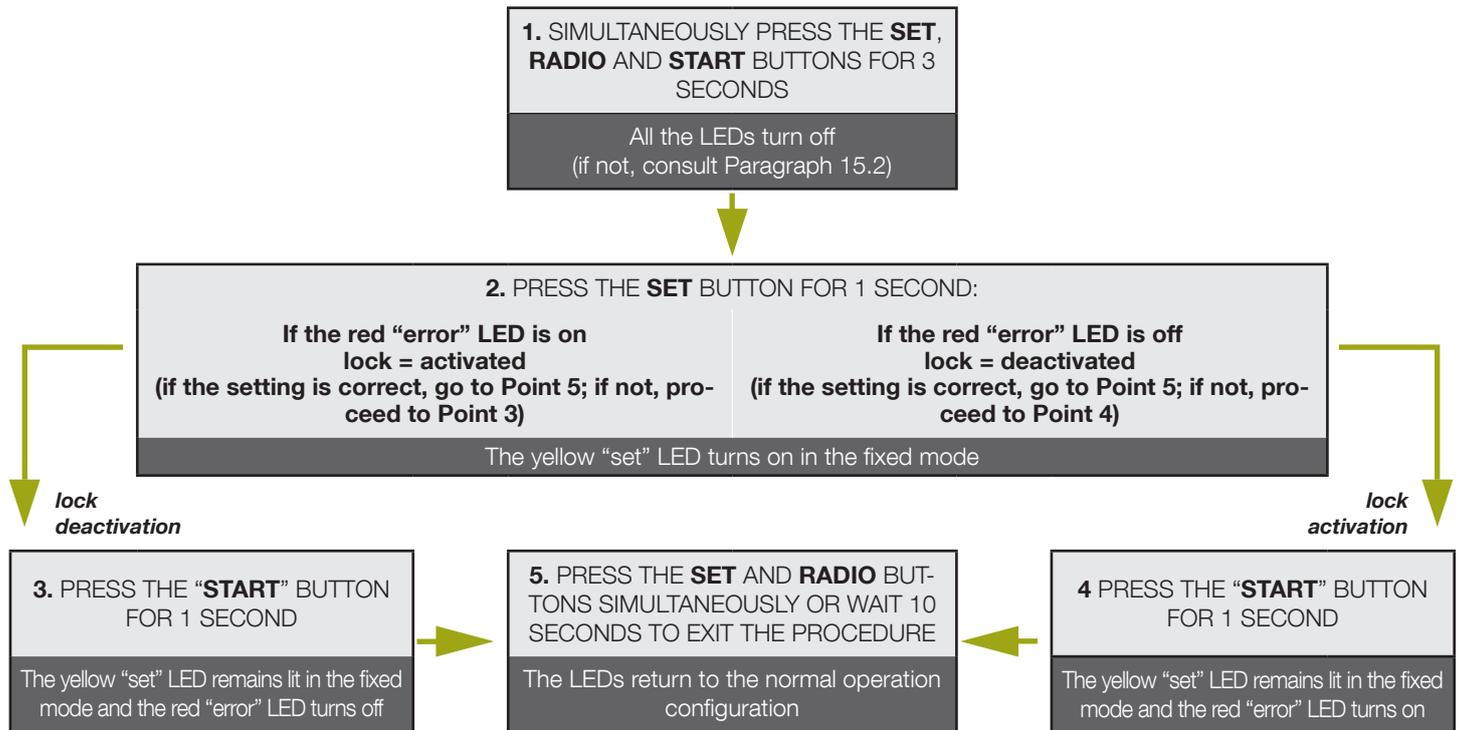
⚠ For controlling the automation also via radio with separate open/close commands, an external radio receiver must be installed.

⚠ If you enable the mode “open / close”, the dip STEP will affect only the radio commands.

15.2 - Activating/deactivating start and pedestrian lock

Default = wired start and start button on PCB activated.

This programming sequence allows for locking the "start" / "ped" wired input and the start button on the control unit. This may be useful for controlling the automation exclusively via radio.



⚠ If the command lock is activated, any device connected to the "start" and "ped" contacts will not be detected by the control unit. When these contacts are closed, the green "start" LED will emit brief flashes.

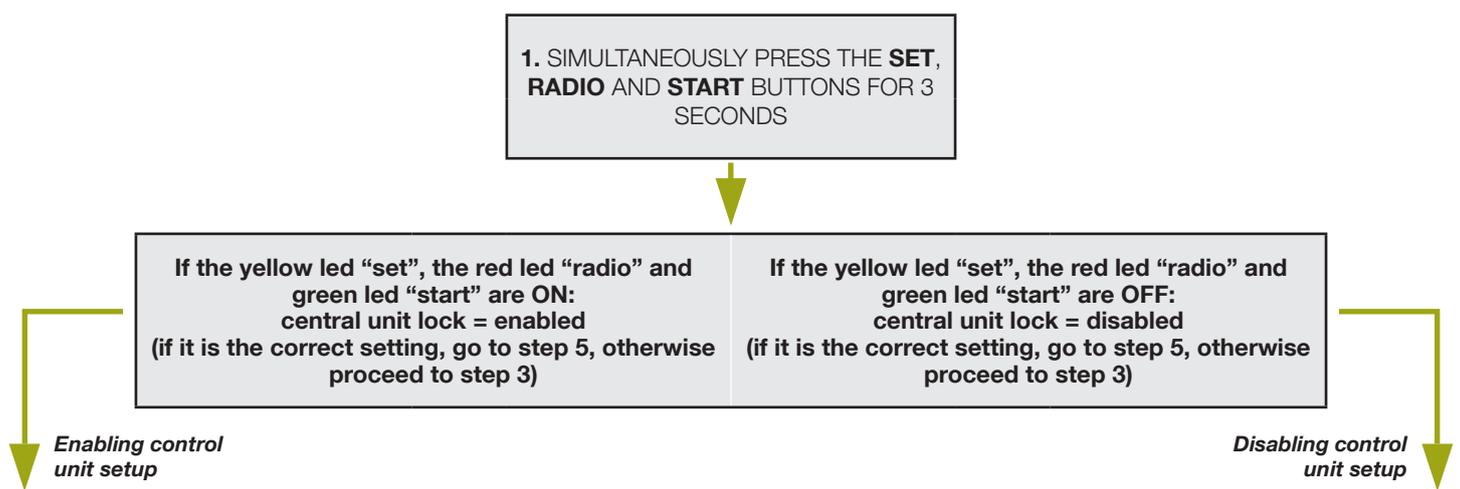
16. Other functions

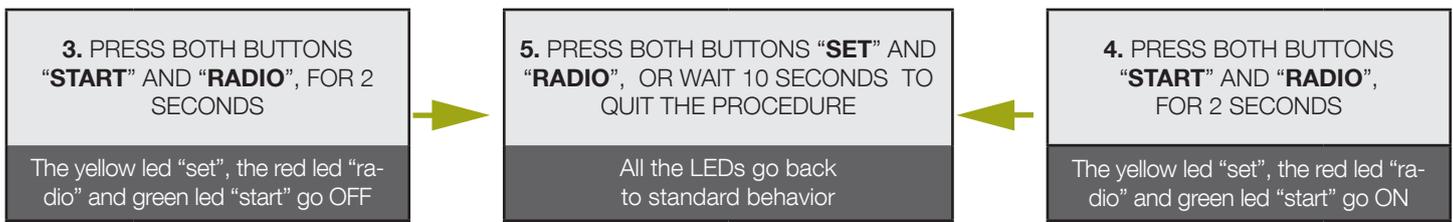
⚠ To interrupt the following programming sequences at any time, press the SET and RADIO buttons simultaneously or wait 10 seconds.

16.1 - Activating/deactivating the control unit protection device

Default = control unit protection device not active.

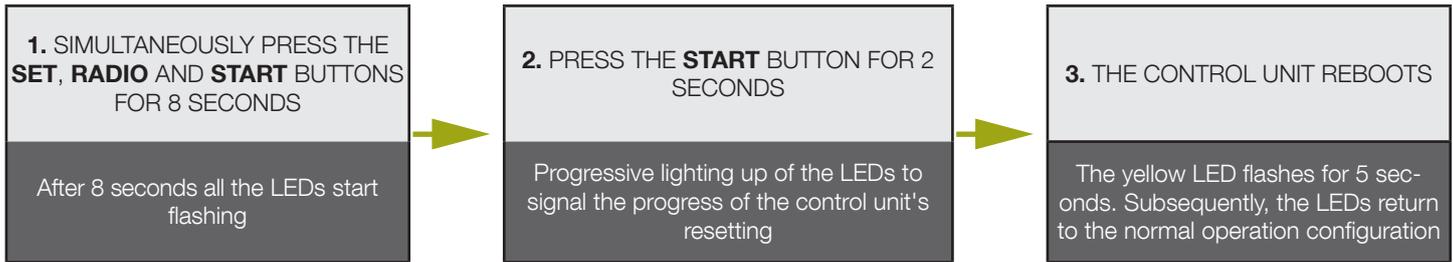
⚠ This programming sequence allows for locking all control unit programming sequences and the settings adjustable through the dip-switches. To perform a new programming sequence or make a dip-switch/trimmer modification effective, the protection must be deactivated.





16.2 - Resetting the control unit's default parameters

⚠ This procedure allows for restoring the control unit's parameters to their default values. The procedure leaves the memorised radio transmitters unaltered. To reset the radio memory as well, see Paragraph 4.4.



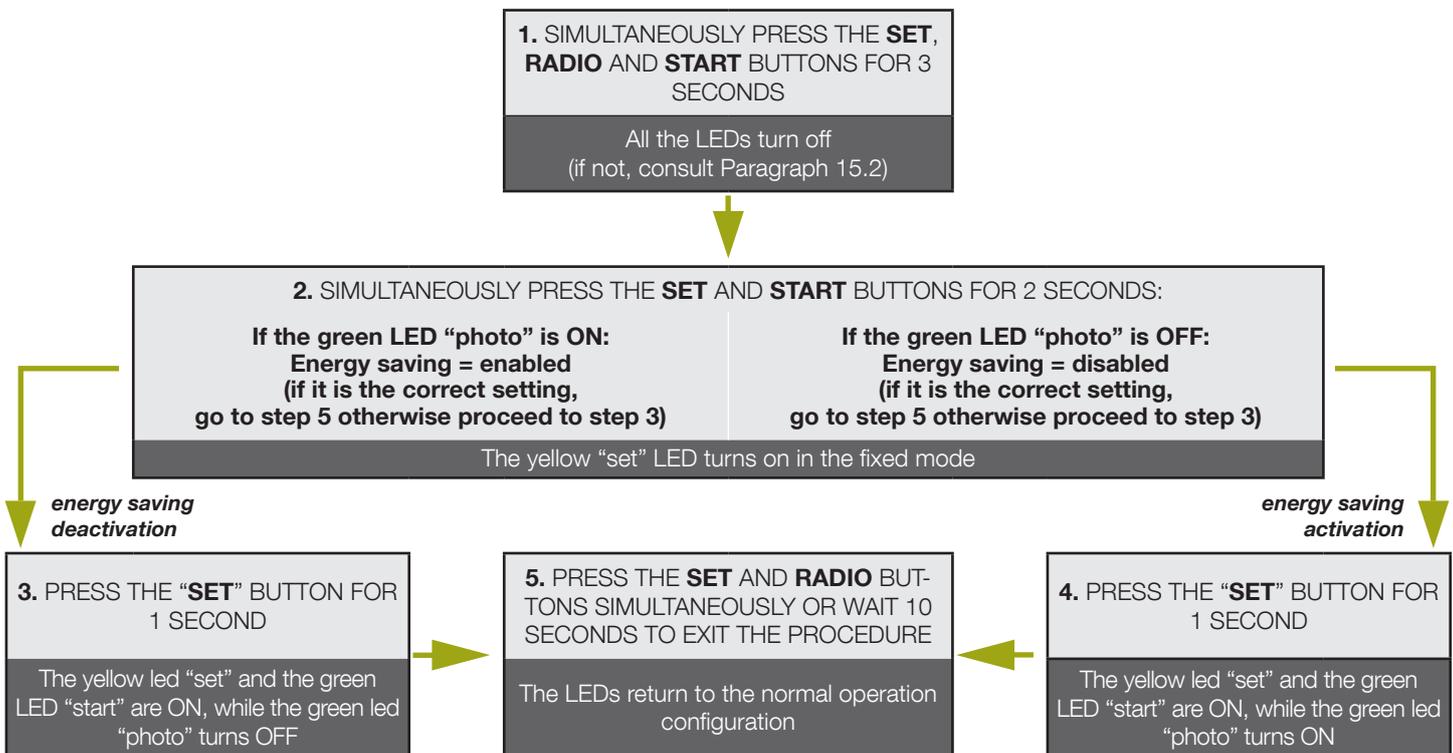
⚠ At the end of this procedure, the red LED "error" will flash 3 times periodically to indicate a new learning procedure is needed.

16.3 - Energy saving mode (only for STARG8 24)

This feature cuts the power supply to the photocells when the control unit is on standby, therefore it decreases the power consumption. It is useful in case of battery power supply conditions.

⚠ When the energy saving mode is activated, the open gate pilot light function is deactivated (Paragraph 8.7)

⚠ The energy saving mode can only be used with safety accessories powered with 24VDC.



Example of connection of accessories with the energy saving mode activated

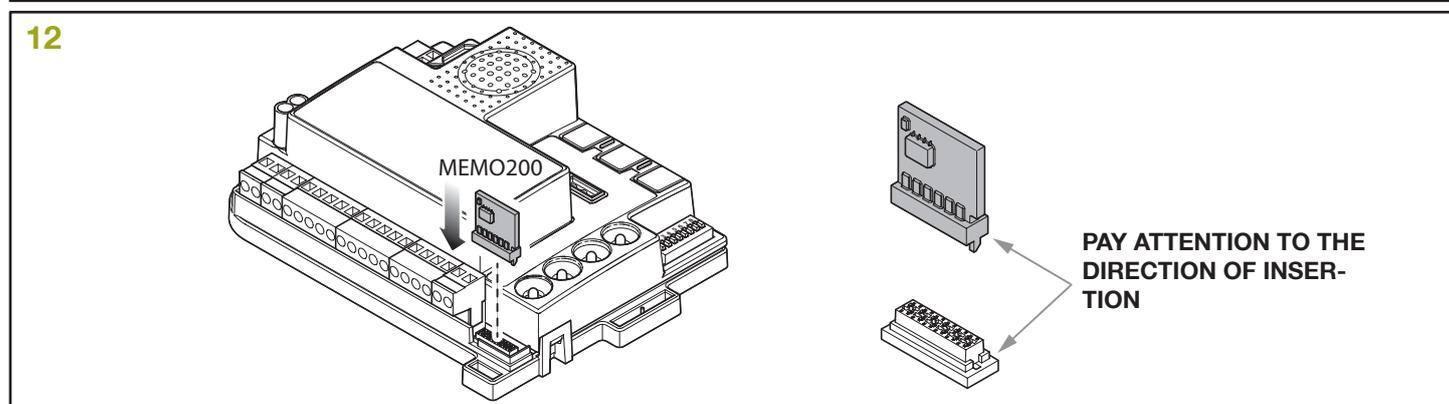
Once the function is activated, it is necessary to connect the 24VDC positive pole of the safety accessories (for example: photocells) to terminal 9 "+TX".

The control devices (e.g.: receivers, spires or photocells connected to the Start contact) must be connected to terminal 8 "+VA".

⚠ If DIP-SWITCH 7 "fast" is put to ON, with the control unit open the accessories remain powered to retain the re-closing function.

⚠ If you activate the power saving mode all the LEDs will turn off after 2 minutes of stand-by

17. Memory management



The control unit is configured for managing an external memory module.

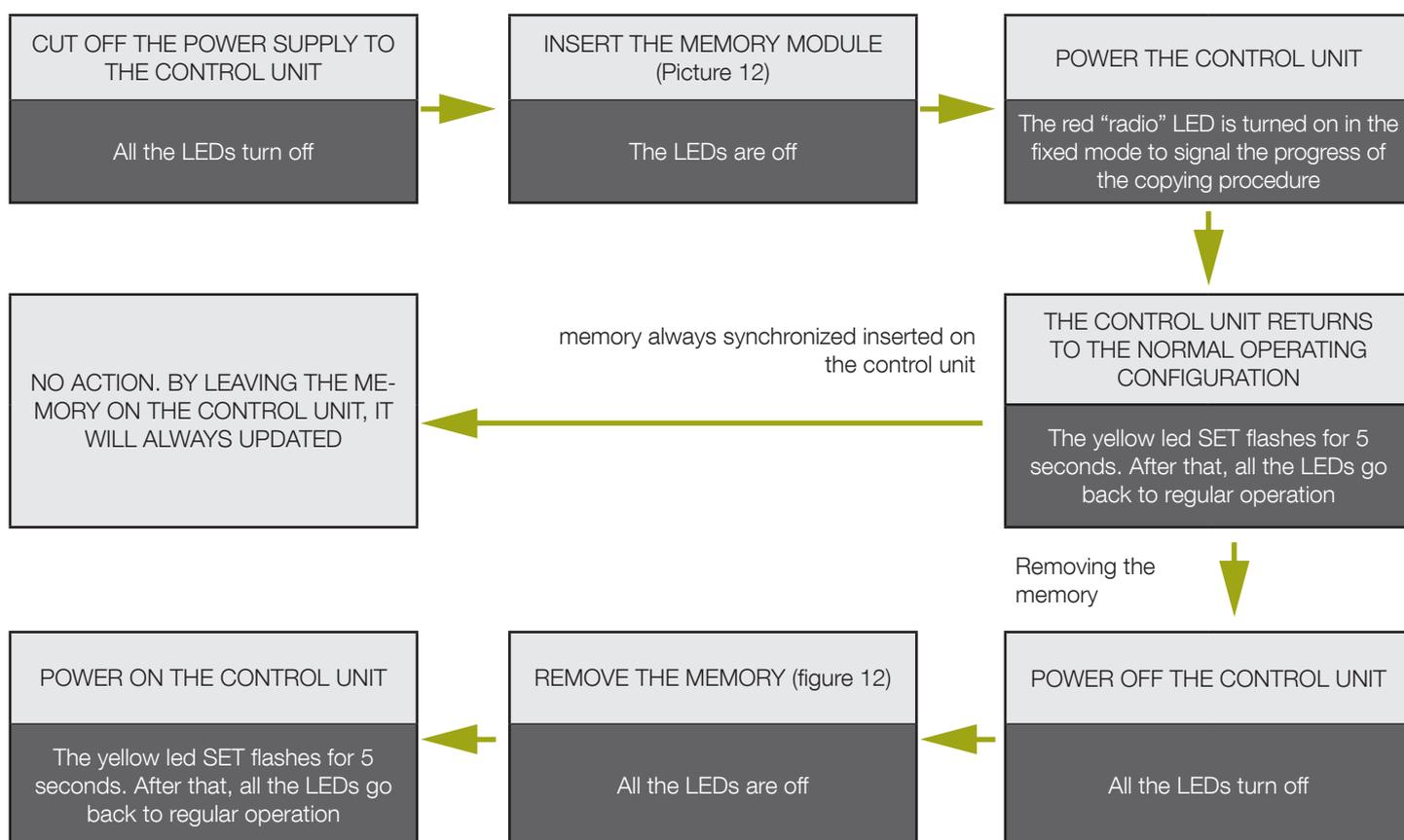
If a new memory is purchased as an accessory, it is possible to make a back-up copy of remote controls and the settings activated through the advanced programming (see Paragraph 16.1).

In the event of an external memory used previously on existing systems, the remote controls and parameters can be imported either automatically or manually (see Paragraph 16.2 or Paragraph 16.3).

17.1 - Using a new memory as a back-up copy

This procedure allows for using an external memory module (purchasable as an accessory) for making a back-up copy of the remote controls and settings activated through the advanced programming.

⚠ The external memory utilised must be new; in case of a memory already containing memorised remote controls, see Paragraph 16.2 or Paragraph 16.3.



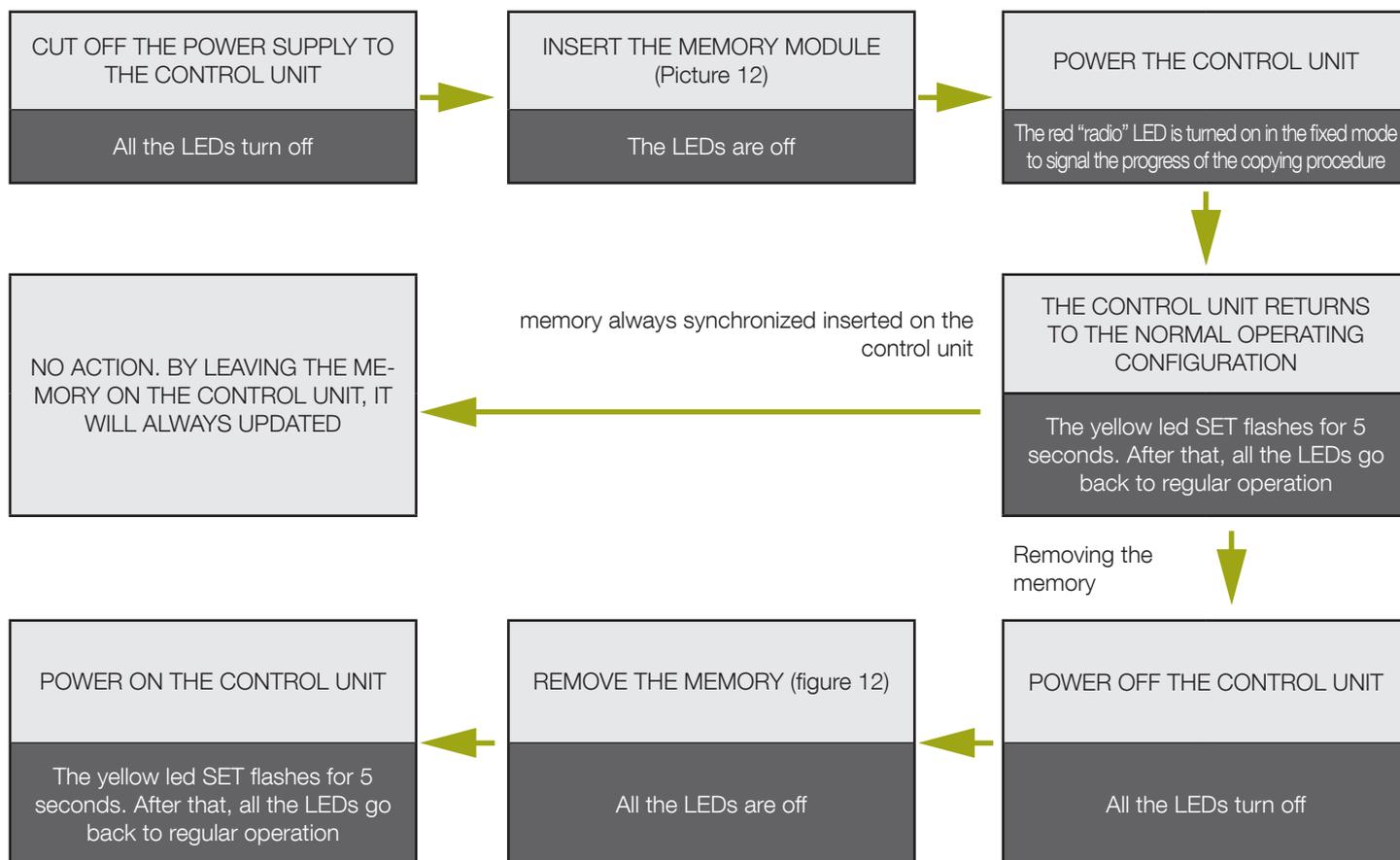
After this procedure, if the memory is left connected to the PCB, the external memory will continue to be updated. If instead no changes occur, such as the addition of transmitters or modifications to parameters, the memory can be removed.

17.2 - Automatic data importing from external memory

This procedure allows for importing, from the external memory to the control unit, the transmitters and any settings activated through the advanced programming.

⚠ To import the advanced settings in addition to the remote controls, the external memory must have been used on a control unit that controlled the same type of motors as the new one (see dip-switch 1 and 2 settings – Paragraph 3.1).

⚠ If the control unit already includes transmitters, these will be maintained.



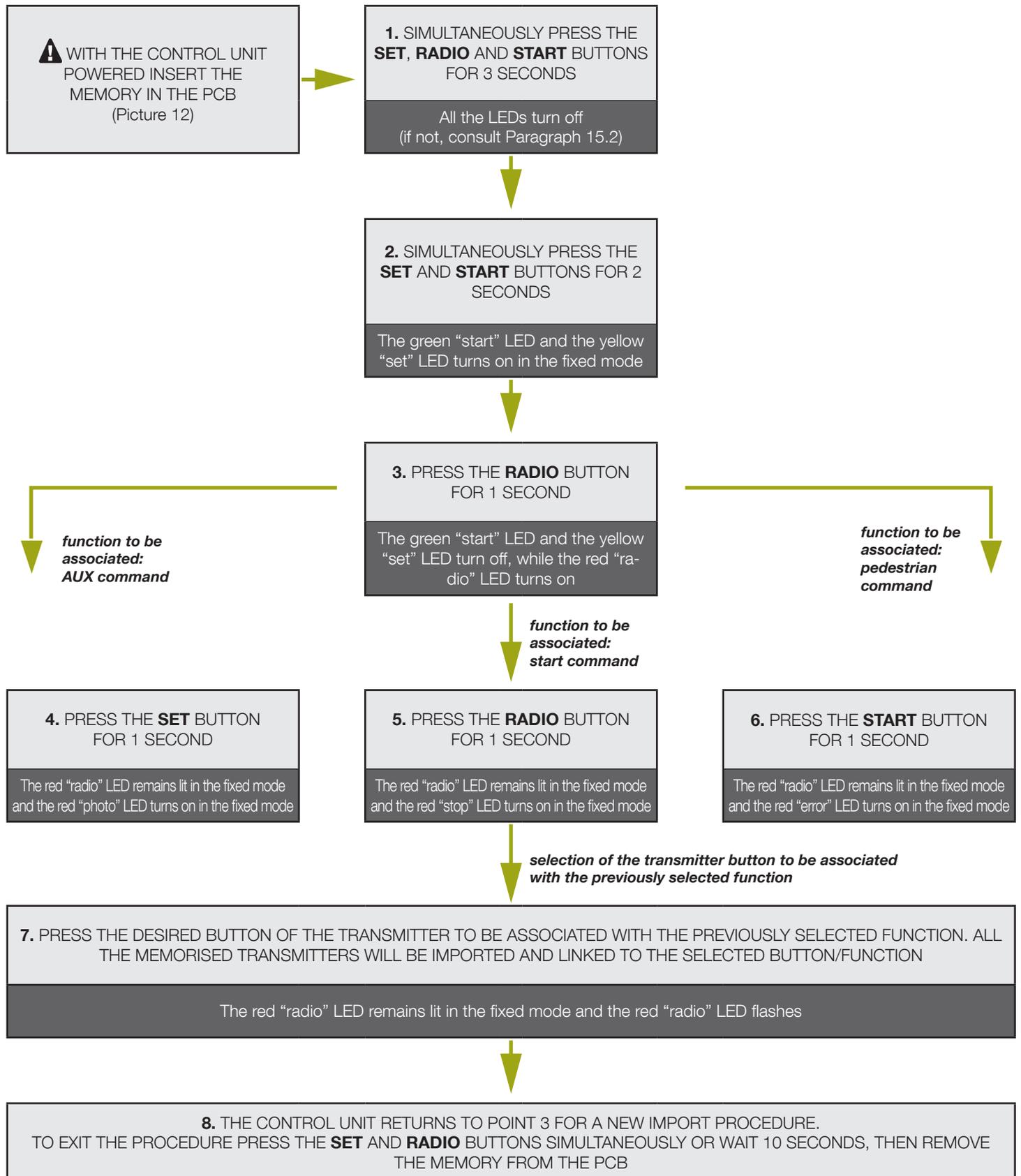
⚠ If before this procedure, the control has been set the same way of the previous one (i.e. by setting the dips 1-2 as in the control unit from which you removed the memory card) this new control unit will import all the standard and advanced settings (eg: Backjump, autotest...)

17.3 - Manual data importing from external memory

This procedure allows for importing transmitters from the external memory to the control unit, by selecting the desired function and the relevant button associated with it. Example: an external memory containing programmed remote controls to be imported, by linking button 3 to the pedestrian opening function.

⚠ In this case, the external memory will not be a back-up copy; once the procedure is completed, the stored values will remain unaltered.

⚠ If the control unit already includes transmitters, these will be maintained.



Dati dell'installatore / *Installer details*

Azienda / *Company* _____

Timbro / *Stamp*

Località / *Address* _____

Provincia / *Province* _____

Recapito telefonico / *Tel.* _____

Referente / *Contact person* _____

Dati del costruttore / *Manufacturer's details*

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