# CT ACTION 09



Control unit for sectional doors Instruction for the installation



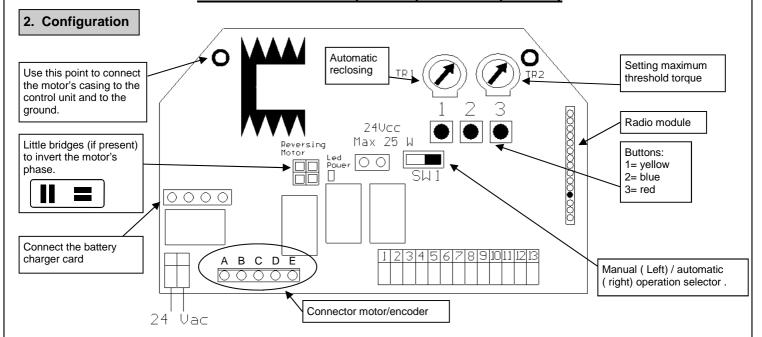


#### 1. Introduction

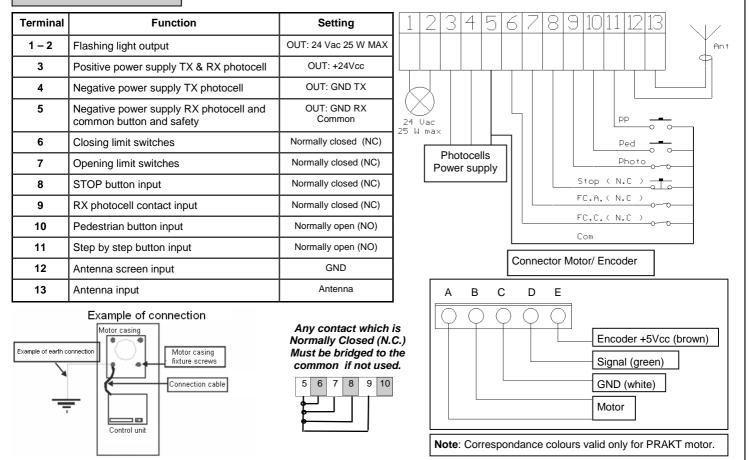
ACTION 09 is a control unit suitable to the control of sectional doors moved by 24Vcc motors with encoder. The coexistence of several types of safeties, such as, for example the control of the current absorbed by the motor and the velocity control, allows a rapid intervention on the anti – squashing prevention. The particular technology utilized allows the learning and the dynamic adjusting of the efforts required to the motor in the normal functioning. The handling of the position by encoder installed in the motor, allows the use in absence of electric limit switches.

ACTION 09 has inputs dedicated to the limit switches connection, step by step connection, pedestrian button, clock, photo – devices and safety stop, further the output for flashing light 24Vac. The control unit allows the adjusting by trimmer of the automatic reclosing time and of the force exercised by the motor.

# WARNING: the control unit ACTION 09 must be used with transformers TCT50 (230Vac) or TCT34 (120vac)



# 3. Electrical connections



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

# 4. Settings

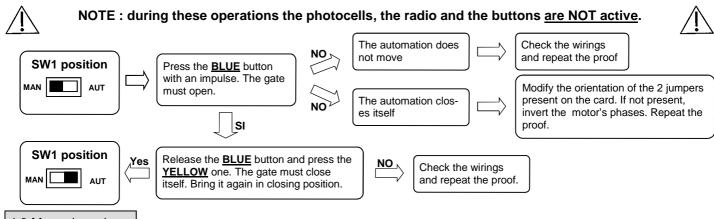
This chapter contains important information for a safe and correct installation. Follow scrupulously all the instructions, because a wrong installation can cause breaks or malfunctioning of the automation.

Warning: before starting the automation's programming deactivate all the gate's locks (unlocked door handle, open lock).

# 4.1 Preliminary checks

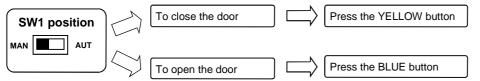
Before giving power supply to the system, check all the wirings carried out. Particularly, check that no damages, short –circuits among cables and that all the accessories are connected to the terminal board in the points indicated on the scheme of previous page. Once given power supply check that:

- Check that there are no excessive frictions; to that aim, unlock the slide and with the necessary precautions move manually the gate in opening and in closing bringing it on the anchorage point of the bar to the shutter self.
  The force necessary to carry out this action must not exceed Kg. 15 (150N).
- Check that the led POWER is turned on fix and that the shutter is in closing position.
- Check that the radio module is inserted.
- 4. Check that the connection of the motors and of the encoders following the procedure described below; This procedure allows to verify the rotation sense of the motors, eventual jamming or malfunctioning during the movement of the wing. It is important to carry out this control to point out wiring mistakes or anything else can jeopardize a normal functioning.



4.2 Manual moving

This procedure must be carried out ONLY by the installer and ONLY during the setting up of the system. This movement must be carried out only in particular conditions where it is not possible to bring again the shutter in closing position in automatic modality.



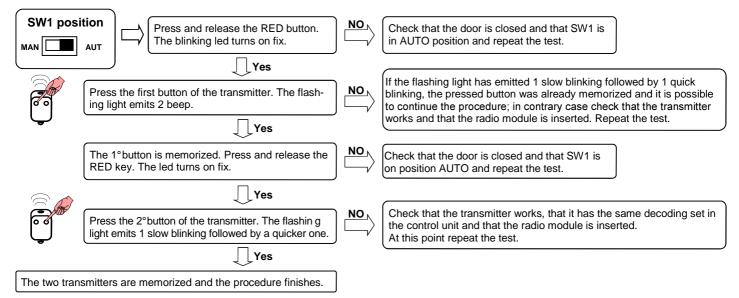


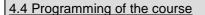
WARNING: the reactivation of the automatically modality (AUT) involves the use of the reached position as position of totally closing.

WARNING: during the manual operation the anti - squashing function is excluded.

#### 4.3 Memorization of the transmitters (only with closed door)

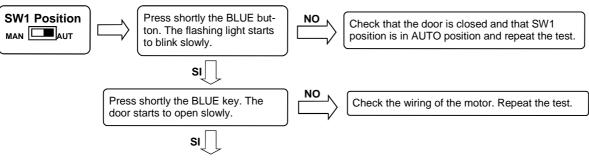
Memorize at least one 1 channel transmitter. The control unit is supplied with decoding. The control unit is supplied with rolling code decoding, to change the decoding type (see paragraph 5.9). During the normal functioning the first button carries out the step – by step function (opening and closing), the second button (optional) handles the function of turning on courtesy light.



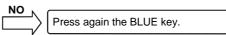


This procedure must be carried out ONLY by an installer and ONLY during the setting up of the system.

For a correct programming, before carrying out any modification, bring always again the gate in totally closed position (see section 4.2).



When the door reaches the desired opening position, press again the <u>BLUE</u> button. The door stops itself. The flashing light blinks fast.





Press the 1° button of the transmitter or the step by step button. The gate closes completely.



When the gate reaches the closing position it stops automatically. The flashing light blinks slowly.



Press the 1° button of the transmitter or the step by step button. The door opens completely, once opened, the flashing light carries out 4 blinking.



The course is memo-

#### WARNING:

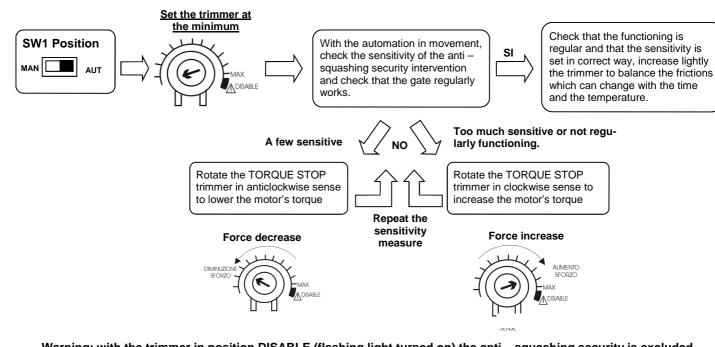
During the memorization of the course and for the successive 2 complete cycles of movement (closing and opening), avoid interventions on the stop and photocells inputs, avoid also the testing of the sense, because the control unit gets in these 2 first memorizations the parameters for a correct functioning.

#### WARNING:

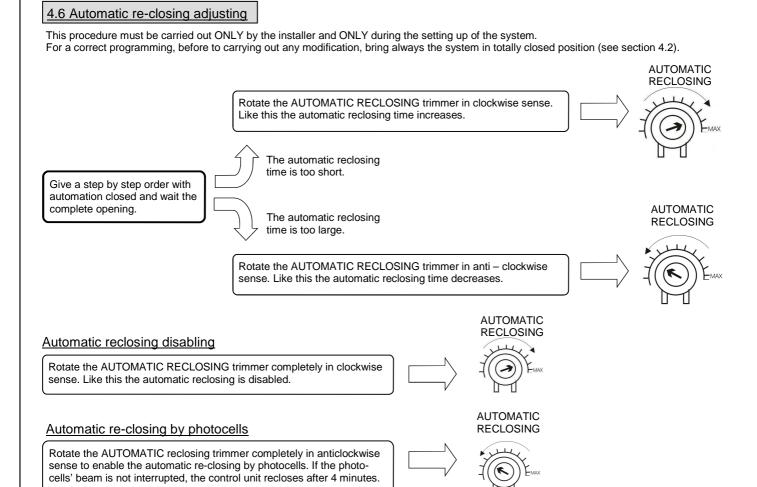
If the gate has stopped itself during the movement, bring it again on close position manually, putting SW1 in manual and utilizing the YELLOW button on the card. Once closed bring again SW1 in automatic position and restart from the beginning.

#### 4.5 Adjusting of the anti-squashing security

This procedure must ONLY be carried out by the installer and ONLY during the setting up of the system. For a correct programming the door must be manually moved with an effort lower than Kg.15. Before of carrying out any modification, bring always the gate in totally closed position (see chapter 2)



Warning: with the trimmer in position DISABLE (flashing light turned on) the anti – squashing security is excluded.

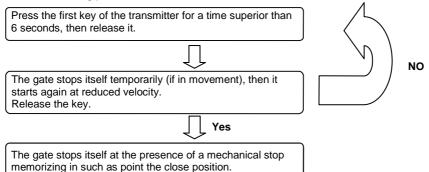


WARNING: the automatic re-closing is deactivated if during the closure the intervention of the anti – squashing sensor happens and the consequent re-opening.

# 4.7 Re-synchronization

This operation must be carried out ONLY in case you observe repeatedly that the gate does not reach the correct position of closure (or if it tends to overstep it), or if you find in the conditions described on point 4.8.

The re – synchronization operation consists on the activation in closing of the gate at reduced velocity with the aim to find the point of total closure; the movement stops itself automatically in the point in which a mechanical stop which obstacles the movement. Such position is identified as closing position.



WARNING: during the operation of re – synchronization the intervention of the anti – squashing security is interpreted as identification of the closing position. To avoid its involuntary intervention the sensitivity of the same results remarkably reduced respect to the normal condition of functioning.

#### 4.8 Gate unlocking

In case of opening of the gate with inserted lock, it is the intervention of the security which involves the stop of the gate.

In this case it is possible that the lock remains locked cause of the tension exercised by the gate. If this happens it is advisable to resort the resynchronizing operation (point 4.7).

#### 4.9 Belt tension adjusting

For an optimal functioning of the control unit and particularly of the anti – squashing security, it is necessary the adjusting of the belt transmitting the movement.

The adjusting must be carried out in such a way as, during the re-synchronization phase (point 4.7) with trimmer for adjusting the force in position of normal utilization, the belt does not present slipping or rather making sure that it does not come out from its seat

# 5. Advanced functions

These procedures are turned ONLY to the installer and ONLY during the setting up of the system.

For a correct programming, before to carrying out any modification bring again the gate in totally closed position (see section 4.2).

N°blink	Selected function	Blink	Yellow button	Blue button	Factory setting
1	Pre-flashing	Slow = disabled / Fast = enable	activation	deactivation	Not active
2	Photocell Test	Slow = disabled / Fast = enable	activation	deactivation	Not active
3	Condomonium setting	Slow = disabled / Fast = enable	activation	deactivation	Not active
4	Inversion on photocells	Slow = disabled / Fast = enable	activation	deactivation	active
5	Clock	Slow = disabled / Fast = enable	activation	deactivation	Not active
6	Inversion on sens	Slow = disabled / Fast = enable	activation	deactivation	active

#### Activation configuration menu

To modify the state of any of these functions it is necessary to activate the configuration menu. This particular state of the control unit can be activated only from stop door and completely closed. In the configuration menu the control unit automatically slides the functions on which it is possible to intervene. The flashing light' led signals the function selected once and once with a variable number of blinking. The passage from one function to another one is carried out automatically (it is enough to keep the red button always pressed). The control unit starts selecting the first function (signaled by 1 blinking), successively keeping pressed the red key you pass to the second function (signaled by 2 blinking) and so on. To enable the learning modality proceed as follows:

- 1. Close the door completely
- 2. Press and keep always pressed the red button
- 3. After 4-5 seconds the led carries out a series of 8 blinking (which signal the activation of the configuration menu). Once finished the series of blinking the control unit is entered in the configuration menu. Do not release the button yet
- 4. Once individuated (through a number of blinking of the flashing light led) the function which you desire to modify, release the red key. Like this the desired function is selected. Once selected the function, the control unit points out the setting blinking with a slow frequency (1 blinking/second) or with a rapid frequency (2 blinking/second) to indicate if the function is active or not according on what reported on the table.
- 5. Then press the correspondent button (make reference to the table) at the new state which you desire to set for the selected function. The blinking frequency will change according to the choice done.

At this point it is possible to modify further functions, or , if you ended, to exit from the learning phase. In case you desire to modify other functions, press and keep pressed again the red key. After a few seconds the control unit will start again to select in sequence the various functions. Then proceed as explained above.

If instead you desire to exit from the learning, it is enough to bring the lever of the selector S1 in manual position, wait 1-2 seconds and successively bring it again in automatic position. Like this, the control unit exits from the learning modality and predisposes itself for the normal functioning.

# 5.1 Pre-flashing

Activating the function, the pre-flashing is enabled. This function carries out BEFORE of each movement a series of blinking to indicate the imminent movement.

## 5.2 Photocells test

This control unit has a function (settable by menu), which allows to carry out a check on the photocell's functioning before of each activation of the motor. Like this you have the possibility to increase the security of the system in case of damaging of the photo – device (for example output relay glued), or of un undesired short – circuit in the photocell's input.

In case of failure, the control unit signals it carrying out one single blinking at the pressure of a button and not carrying out any movement. This checking is carried out after that the control unit has received a control to move, but before to give tension to the motor.

#### 5.3 Condominium function

With this function active, each control given via radio or by step by step buttons and/or pedestrian causes only the opening of the door. The closure is entrusted to the automatic reclosing function, which will have therefore to be NECESSARILY ACTIVATED, because each control of closing is ignored. In case in which the condominium function is active and the automatic reclosing is disabled by the respective adjusting trimmer (rotate all in clock-wise sense), the control unit puts itself in state of alarm signaled by quick blinking of the flashing light.

#### 5.4 Inversion on photocell

With this function active, the control unit does not stop the movement during the opening phase, in case of interruption of the photocell's beam, while inverts completely if the interruption happens during the closure.

Deactivating this function, the control unit locks the movement, both in opening and in closing until the removing of the obstacle.

Once removed the obstacle, the control unit starts the automation in opening

#### 5.5 Clock function

Activating the clock function, the PEDESTRIAN function becomes clock input where it is possible to connect a timer for the programmed opening of the automation. The contact is interpreted like request of opening and permanence on open state until the contact remains closed. When the contact opens itself, the automation automatically closes itself.

# 5.6 Inversion on sense

With this function active, if a sense is detected during the opening phase, the control unit blocks and inverts completely unless in the last centimeters of the course, where it carries out a brief inversion.

Deactivating this function, the control unit locks the movement both in opening and in closing, if a sense is detected until a next control.

# 5.7 Reset

If it is necessary to carry out a reset of the control unit (deleting of the parameters of the course and recharge the factory settings), proceed as follows:

- 1. Cut off the power supply from the system
- 2. Set the SW1 selector on AUT (automatic)
- 3. Press the red key
- 4. Keep it pressed while you give again power supply to the system
- 5. Keep it pressed again until the flashing light does not turns on 3 times.
- 6. At this point release it. The reset has been carried out.

# 5.8 Deletion of one single transmitter (only with the rolling code decode)

If it is necessary to cancel one single transmitter, proceed as follows:

- 1. Set the SW1 selector on AUT (automatic)
- 2. Press the hidden key of one transmitter already learned, or press the red key of the control unit, the flashing light turns on.
- 3. Press the hidden key and contemporarily the first button of the transmitter which you want to cancel.

# 5.9 Selection of the decoding type and total deletion of the memory

If it is necessary to delete one single transmitter, proceed as follows:

- Set the selector SW1 on AUT (automatic)
- 2. Press the hidden key of a transmitter already learned, or press the red key of the control unit, the flashing light turns on
- 3. Press the hidden key and contemporarily the first button of the transmitter which you want to delete, the flashing light turns off and the deletion is completed.
- 4. Keep them pressed until you give again power supply to the system.
- 5. Keep them again pressed until the flashing light blinks 3 times.
- 6. Now release them. Set SW1 on AUTO. The selection of the decoding and the total deletion of the memory have been carried out.

Note: this procedure carries out a total deletion of the memory of the control unit. So, there is the complete erasing of the parameters previously memorized (gate course, memorized transmitters.....) and the advanced functions go back to the point settings, before of carry out any other programming. To reset the course it is not necessary to reset the memory!!!!!!!!!

# 6. Guide to the resolution of the main problems.

Type of problem	Probable cause	Solution	
On activating the opening command the automation does not move.	No electrical power supply	Check the presence of the electrical voltage and all the connections to the electrical network.	
the automation does not move.	Burned fuse	Substitute the fuse with a similar one.	
On activating the opening command the gate moves for a brief time and then stops.	Incorrect encoder connection	Check the wiring of the encoder's wires.	
On activating the opening command, the automation moves to closure.	Jumper direction motor inverted	Invert the Jumpers.	
You cannot manage to enter into the remote control programming	The gate is not closed	Close the gate (in the manual). If the gate was closed set selector S1 to manual, wait 1 second and re-set it to automatic. Try again entering into setting mode.	
You cannot manage to programme the remote controls	The type of set decoding in the control panel does not correspond to the type of remote control in use.	Check which decoding has been set and possibly select that which corresponds to the remote control in use.	
You cannot manage to enter into the opening/closure programming mode.	The gate is not closed	Close the gate (in the manual). If the gate was closed set selector S1 to manual, wait 1 second and re-set it to automatic. Try again entering into setting mode.	
The control panel is attached to power supply by the gate does not move.	A normally closed input is not active	Check the photocell, stop and limit switch input. If not used they must be bridged to the common.	

GUARANTEE - In compliance with legislation, the manufacturer's guarantee is valid from the date stamped on the product and is restricted to the repair or free replacement of the parts accepted by the manufacturer as being defective due to poor quality materials or manufacturing defects. The guarantee does not cover damage or defects caused by external agents, faulty maintenance, overloading, natural wear and tear, choice of incorrect product, assembly errors, or any other cause not imputable to the manufacturer. Products that have been misused will not be guaranteed or repaired. Printed specifications are only indicative. The manufacturer does not accept any responsibility for range reductions or malfunctions caused by environmental interference. The manufacturer's responsibility for damage caused to persons resulting from accidents of any nature caused by our defective products, are only those responsibilities that come under Italian law.



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