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PROGRAMMING

The digital unit PD1 is a V2 ELETTRONICA innovatory product, which guarantees a safe and reliable automation of one- and two-leaf swing gates.

PD1 has been designed to be suitable to all needs, being an extremely versatile unit that meets all the necessary requirements for a functional and efficient installation.

PD1 is provided with a display that, not only makes programming simple, but also allows a continuous monitoring of the input statuses; in addition, thanks to a menu structure, the working times and the operation logic can be set easily.

Being built with a reliable technique called *surface assembly*, PD1 is characterized by a complete isolation between the digital circuit and the power circuit, in accordance with the electrical safety rule EN 60335 - 1 and the compatibility rule ETS 300 683.

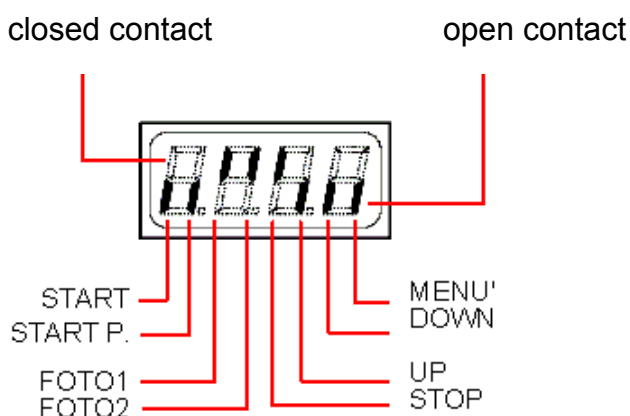
The unit is provided with an electronic torque regulator and a control for zero-current relay switching, which prevents sparking between the contacts; with a warning light to monitoring the gate position and a free relay's contact with programmable logic (i.e. timing courtesy light).

This unit works solely with ROYAL AND ROYAL PLUS series controls at 433,92 MHz.

CONTROL PANEL

Perform the electrical connections to the terminal board, then supply power to the system: the unit will check the operation status of the display, by turning all the segments on for 1,5 seconds (**8.8.8.8**); after this, the display will show the firmware version for 1,5 seconds, for instance *Pr 1.0*.

Now, the display will show a control panel:



The control panel represents the physical status of the terminal board contacts and of the program mode keys: if the upper vertical segment is on, the contact is closed; if the lower vertical segment is on, the contact is open (the above picture shows an instance where the inputs START, START P., PHOTO1, PHOTO2, and STOP have all been correctly connected).

PROGRAMMING

The PD1 unit presents a programming structure with menus, each of which corresponds to a function in the unit (function menu) or to a working time setting (time menu).

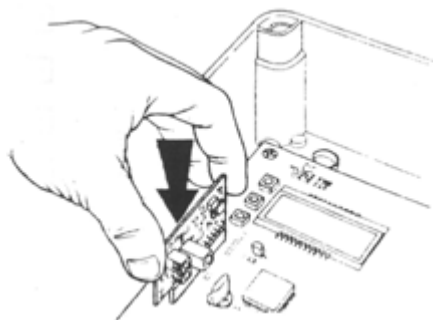
Time menus allow adjusting the unit working times (e.g.: leaf opening or closing time, locking time, preflashing time, etc.), which can be set from 0 to 120 seconds with a $\pm 0,5$ seconds interval.

On the other side, the function menu are used to activate the required functions (e.g. timed lights, PHOTO1 active as a travelling edge, PHOTO2 inactive, etc.).

Some time menus depend on certain function menus (e.g.: if the AUTOMATIC CLOSING is activated – but only in this case – a TIME-OUT need to be set); then, to simplify the programming, these time menus have been placed in the function menus on which they depend. Specifically, menus

AUTOMATIC CLOSING (Ch.AU), ANTISKID (ASM), and PHOTOCELL TIME-OUT (Ft.PA) offer some "time menus" among the selectable options.

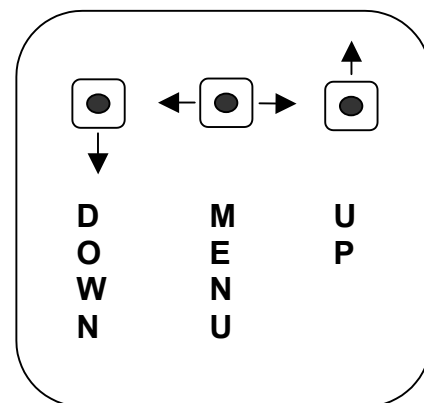
INSERTING THE RECEIVER MODULE



FUNCTION OF KEYS: MENU, UP, DOWN

When the program mode function is activated, press key UP or DOWN to select the menus, thus performing a forward or backward shift (for a fast shift, press and hold). Press key MENU to access the settings in order to change them through keys UP and DOWN.

- Pressing the UP key, the menu functions can be scrolled from below.
- Pressing the DOWN key, the menu functions can be scrolled from above.
- Pressing the MENU key, the settings to be changed can be accessed and selected by pressing again.



ATTENTION: when the program mode function is not activated, pressing of the UP key corresponds to the START command, pressing of the DOWN key corresponds to the PEDESTRIAN START command: this way, the service engineer is enabled to perform the test and the set-up.

To activate the program mode, proceed as follows.

After powering the unit, the display should show the control panel (therefore, check that the connections made are correct).

Press and hold key *MENU* until the display shows **dEF**.

Now the program mode is activated: if no action is performed within 1 minute, the unit will exit the program mode and show the control panel again. The PD1 unit can be set up in two different program modes: DEFAULT PROGRAM MODE or CUSTOM PROGRAM MODE.

DEFAULT PROGRAM MODE

This type of programming allows loading the V2 ELETTRONICA default program in the memory: the standard data that will be inserted automatically are shown in the table below (in the column DEFAULT DATA).

The display should show **dEF**.

- Press MENU: the display will show **no**.
- Press UP or DOWN: the display will show **si**
- Press MENU to confirm: the display will show **dEF**.

Now, to memory-store the standard data, exit the program mode: follow the instructions in the "end of programming" menu.

PERSONALIZED PROGRAMME

This type of programming allows changing the working times and the unit functions, according to the user's needs: by means of the UP and DOWN keys, the required menus can be selected (for a fast scrolling, the key must be held). When the changes are completed, select the "END OF PROGRAMMING" menu and exit: the new data are stored in the memory.

CAUTION: if, during the programming, no actions are performed within 1 minute, the unit automatically exits the program mode and any changes made are discarded.

GATE 1 OPENING TIME

This menu is adjustable from 0 to 120 seconds ($\pm 0,5$) and determines the time of opening of gate 1.

- Press UP or DOWN keys, until the display shows **t.AP1**
- Press the MENU key, the display shows **22.5**
- Set the wished time pressing the UP or DOWN keys.
- Press the MENU key to confirm: the display shows the writing: **t.AP1**.

GATE 2 OPENING TIME

This menu is adjustable from 0 to 120 seconds ($\pm 0,5$) and determines the time of opening of gate 2.

- Press UP or DOWN keys, until the display shows **t.AP2**
- Press the MENU key, the display shows **22.5**
- Set the wished time pressing the UP or DOWN keys
- Press the MENU key to confirm: the display shows the writing: **t.AP2**.

OPENING TIME OF PEDESTRIAN GATE

This menu is adjustable from 0 seconds to t.AP1 ($\pm 0,5$) and determines the opening time of pedestrian gate.

- Press UP or DOWN keys, until the display shows **t.APP**
- Press the MENU key, the display shows **6.0**
- Set the wished time pressing the UP or DOWN keys
- Press the MENU key to confirm: the display shows the writing: **t.APP**

CLOSING TIME GATE 1

This menu is adjustable from 0 to 120 seconds ($\pm 0,5$) which is the closing time for gate 1. To avoid the uncompleted closing of the gate, we suggest to set a longer opening time of t.AP1.

- Press UP or DOWN keys, until the display shows **t.Ch1**
- Press the MENU key, the display shows **23.5**
- Set the wished time pressing the UP or DOWN keys
- Press the MENU key to confirm: the display shows the writing: **t.Ch1**

CLOSING TIME GATE 2

This menu is adjustable from 0 to 120 seconds ($\pm 0,5$) which is the closing time for gate 2. To be sure of the perfect closing of the gate, we suggest to set a longer opening time t.AP2.

- Press UP or DOWN keys, until the display shows **t.Ch2**
- Press the MENU key, the display shows **23.5**
- Set the wished time pressing the UP or DOWN keys
- Press the MENU key to confirm: the display shows the writing: **t.Ch2**

CLOSING OF PEDESTRIAN GATE

This menu is adjustable from 0 to t.Ch1 (± 0.5) and determines the closing time of gate 1. In order to avoid the uncompleted closing of the gate, we suggest to set a longer opening time of t.APP.

- Press UP or DOWN keys, until the display shows **t.ChP**
- Press the MENU key, the display shows **7.0**
- Set the wished time pressing the UP or DOWN keys
- Press the MENU key to confirm: the display shows the writing: **t.ChP**

CLOSING TIME GATE 2 DURING PEDESTRIAN CYCLE

Enables the adjustment from 0 to **tChP** (± 0.5) and determines the time through which gate 2 will close during the closing phase of the pedestrian gate.

- Press the keys UP or DOWN until the display shows **t.C2P**
- Press the MENU key, the display shows **0.0**
- Set the wished time pressing the UP or DOWN keys
- Press the MENU key to confirm: the display shows the writing: **t.C2P**

GATE DELAY DURING OPENING

In order to avoid any collision of the gate during the opening phase, the time of delay should be introduced **r.AP**, which is adjustable from 0 to 120 seconds (± 0.5). In such a case the opening time of gate 2 is delayed in comparison to the gate 1.

- Press the keys UP or DOWN until the display shows **r.AP**
- Press the MENU key, the display shows **1.0**
- Set the wished time pressing the UP or DOWN keys
- Press the MENU key to confirm: the display shows the writing: **r.AP**

GATE DELAY DURING CLOSING

In order to avoid the colliding of gate's during the closing the time of delay should be introduced **r.Ch**, which is adjustable from 0 to 120 seconds (± 0.5). In such a case the closing time of gate1 is delayed in comparison to the gate2.

- Press the keys UP or DOWN until the display shows **r.Ch**
- Press the MENU key, the display shows **3.0**
- Set the wished time pressing the UP or DOWN keys
- Press the MENU key to confirm: the display shows the writing: **r.Ch**

LOCK TIME

When the gate starts the opening phase, the control unit must excite the electro lock in order to hook it out and enable the opening of the gate. The time **t.SEr** determines the duration of excitation, and is adjustable from 0 to 120 seconds (± 0.5).

- Press the keys UP or DOWN until the display shows **t.SEr**
- Press the MENU key, the display shows **3.0**
- Set the wished time pressing the UP or DOWN keys
- Press the MENU key to confirm: the display shows the writing **t.SEr**

LOCK ADVANCE TIME

This menu permits to anticipate the excitation of the lock on a set time from 0 to t.SEr (with a scanning of ± 0.5). During the advance locking time the gate does not move so to always guarantee the unhooking of the electrical lock.

- Press the keys UP or DOWN until the display shows **t.ASE**
- Press the MENU key, the display shows **0.0**

- Set the wished time pressing the UP or DOWN keys
- Press the MENU key to confirm: the display shows the writing **t.ASE**

BACKLASH TIME

To avoid that the gate starts the opening phase before the electrical locks is unhooked, it is possible to introduce a time of inversion adjustable from 0 to 120 seconds ($\pm 0,5$). In this way during the opening phase, the gate inverts the motion through the set time permitting the unhooking of the electrical lock.

- Press the keys UP or DOWN until the display shows **t.inv**
- Press the MENU key, the display shows **0.0**
- Set the wished time pressing the UP or DOWN keys
- Press the MENU key to confirm: the display shows the writing **t.inv**

PRE-FLASHING TIME

This menu permits the introduction of a pre-flashing that occurs before any movement of the gate either in opening or in closing phase: the time of pre-flashing can be adjusted from 0 to 120 seconds ($\pm 0,5$).

- Press the keys UP or DOWN until the display shows **t.PrE**
- Press the MENU key, the display shows **1.0**
- Set the wished time pressing the UP or DOWN keys
- Press the MENU key to confirm: the display shows the writing **t.PrE**

SLOWING DOWN TIME

This menu permits the activation of the gate slowing down function for a time to be set between 0 and 120 s ($\pm 1,5$ s). To set the slowing down function proceed as follows: leave a slowing down time at 0 and make sure that the gate opens and closes correctly. After that, set the slowing down time (for ex. 5 or 6 s).

- Press the keys UP or DOWN until the display shows **t.rAL**
- Press the MENU key, the display shows **0.0**
- Set the wished time pressing the UP or DOWN keys
- Press the MENU key to confirm: the display shows the writing **t.rAL**

FAST CLOSING TIME AFTER SLOWING DOWN DURING CLOSING

When a slowing down time different from 0 s is set, it is possible that the gate speed is not sufficient to trigger the lock during closing. For this reason, after the end of the slowing down phase, it is possible to close the gate at a normal speed (without slowing down) for a time to be set between 0 and 120 s ($\pm 0,5$).

- Press the keys UP or DOWN until the display shows **t.CvE**
- Press the MENU key, the display shows **0.0**
- Set the wished time pressing the UP or DOWN keys
- Press the MENU key to confirm: the display shows the writing **t.CvE**

MOTOR POWER

This menu permits to adjust the motor power from 30 to 100% with a scanning of $\pm 0,5$.

- Press the keys UP or DOWN until the display shows **Pot**
- Press the MENU key, the display shows **40**
- Set the wished value pressing the UP or DOWN keys
- Press the MENU key to confirm: the display shows the writing **Pot**

START OFF

When the gate is at a standstill and is going to move, it is contrasted by the starting inertia. As a consequence of this, if the gate is very heavy the gates might not move. By activating the start off function, it is possible to win the initial inertia thanks to the motor start to the maximum of the power for 2 seconds.

- Press the keys UP or DOWN until the display shows **SPUn**
- Press the MENU key, the display shows one of the 2 writings:
 - no** the motor start to the maximum the power is not activated.
 - Si** the motor start to the maximum the power is activated.
- Set the wished functions pressing the UP or DOWN keys.
- Press the MENU key to confirm, on the display will appear **SPUn**.

START IN OPENING

This menu permits to select the functions of start during the opening phase.

- Press the keys *UP* or *DOWN* until the display shows **St.AP**
- Press the *MENU* key, the display shows one of the 3 writings:
 - no** the command START is not available.
 - ChiU** the command START close the gate.
 - PAUS** the command START stop the gate and goes into in PAUSE.
- Set the wished functions pressing the UP or DOWN keys.
- Press the MENU key to confirm, on the display will appear **St.AP**

START IN CLOSING

This menu permits to select the functions of start during the closing phase.

- Press the keys UP or DOWN until the display shows **St.Ch**
- Press the MENU key, the display shows one of the 2 writings:
 - StoP** the command START stop the gate.
 - APEr** the command START open the gate
- Press the MENU key, the display shows one of the 2 writings.
- Press the MENU key to confirm, on the display will appear **St.Ch**.

START IN PAUSE

This menu permits to select the functions of the command start during the standstill.

- Press the keys UP or DOWN until the display shows **St.PA**
- Press the MENU key, the display shows one of the 2 writings:
 - no** the command START is not available. This function cannot be selected until the automatic closing has been activated (menu Ch.AU).
 - ChiU** the command START closes the gate.
- Set the wished functions pressing the UP or DOWN keys.
- Press the MENU key to confirm, on the display will appear **St.PA**.

PEDESTRIAN START IN OPENING

This menu permits to select the functions of the command of START P. during the opening phase.

- Press the keys UP or DOWN until the display shows **SP.AP**
- Press the MENU key, the display shows one of the 3 writings:
 - PAUS** the command PEDESTRIAN START stops the gate and goes in pause
 - no** the command PEDESTRIAN START is not available
 - ChiU** the command PEDESTRIAN START closes the gate
- Set the wished functions pressing the UP or DOWN keys.
- Press the MENU key to confirm, on the display will appear **SP.AP**.

THE PHOTOCELL IN PAUSE

This menu permits to determine the functioning of two photocells during the pause phase.

- Press the keys UP or DOWN until the display shows **Ft.PA**
- Press the MENU key, the display shows one of the 2 writings:
 - rPAU** the interruption of the photocell's ray causes the top of the pause time; when the photocells work again, the pause time restart from zero
 - t.PCh** the interruption of the photocell's ray causes the top of the pause time; when the photocells work again, the gate stops for a time to be set between 0 to 120 seconds.
- Set the wished functions pressing the UP or DOWN keys.
- Press the MENU key to confirm.

If the function is **t.PCh**, the display shows **5.0**

- Press the button UP or DOWN to program the wished time.
- Press the MENU key to confirm, on the display will appear: **Ft.PA**.

If the function is **rPAU**, on the display will appear: **Ft.PA**.

AUTOMATIC CLOSING

Permits the selection between the semiautomatic or automatic functioning. By the semiautomatic functioning the command of START or PEDESTRIAN START opens the gate, when the opening is complete the gate remains still until the successive command of opening, which will reclose it. On the other hand, it stops automatically and remains in pause phase for the set time (t.PAU), then it closes again through the set closing time. If the cycle is started with a START, the control unit ignores the command START P. until the end of the cycle. The in pause time is adjusted from 0 to 999 seconds.

- Press the MENU key to confirm, on the display will appear **Ch.AU**
- Press the MENU key, the display shows one of the 2 writings:
 - no** the automatic reclosing is not available, the gate is semiautomatic.
 - t.PAU** the reclosing is available, the standstill time is set from 0 to 999.
- Set the wished functions pressing the UP or DOWN keys.
- Press the MENU key to confirm.

If the function is **t.PAU**, the display shows **10.0**

- Set the wished time pressing the UP or DOWN keys.
- Press the MENU key to confirm, on the display will appear **Ch.AU**.

If the function is **no**, on the display will appear **Ch.AU**.

IMPORTANT: If the automatic reclosing is not available, it is necessary to have the command start in pause menu St.PA).

COURTESY LIGHTS

Thanks to the connection "courtesy light" the PD1 control unit enables the connection of the courtesy lights (I.E. garden lights), which can work automatically (lights on for the whole cycle) or timed (lights on for a time adjustable from 0 to 999 seconds). The lights turn on with a START or PEDESTRIAN START control. It is also possible to control this connection using the code memorized in the radio input **tEL4**, in this last case the connection "courtesy light" becomes an auxiliary connection to which it is possible to match one of the following functional logics:

- monostable:** it activates the output relay through all the tx transmission time, when the transmission ends the relay is disconnected.
- bistable:** it activates the relay with the tx first transmission, the relay disconnects with the second transmission.
- timer:** the tx transmission triggers the relay which disconnects automatically after a time adjustable between 0 and 999 seconds.

- Press the keys UP or DOWN until the display shows **LUCi**
- Press the MENU key, the display shows one of the 3 writings:

- t.LUC** the courtesy lights start from a time adjustable from 0 to 999 seconds.
- CiCL** the courtesy lights are on through the whole cycle.
- AUS** auxiliary exit with adjustable logical functioning.

- Set the wished functions pressing the UP or DOWN keys.
- Press the MENU key to confirm

If the function selected is **AUS**, one of the following will appear on the display:

- tiM** timed auxiliary exit (time adjustable from 0 to 999 seconds)
- biSt** auxiliary output relay with bistable functioning
- Mon** auxiliary output relay with monostable functioning

- Press the UP or DOWN keys to select the wished function.
- Press the MENU key to confirm.

If the selected function is **tiM**, on the display will appear **60.0**

- Press the UP or DOWN keys to select the wished time.
- Press the MENU key to confirm, on the display will appear **LUCi**.

If the selected function is **biST** or **Mon** on the display will appear **LUCi**.

If the function is **t.LUC**, on the display will appear **60.0**

- Press the UP or DOWN keys to select the wished time.
- Press the MENU key to confirm, on the display will appear: **LUCi**.

If the function is **CiCL**, on the display will appear: **LUCi**.

FLASHLIGHT IN PAUSE

This menu permits to activate or to disable the flashlight during the pause time.

- Press the keys UP or DOWN until the display shows **LP.PA**
- Press the MENU key, the display shows one of the 2 writings:
 - no** not activated flashlight in pause
 - Si** activated flashlight in pause
- Press the MENU key, the display shows one of the 2 writings.
- Press the MENU key to confirm, on the display will appear: **LP.PA**.

FLASHLIGHT WITH INTERMITTENCE

The control unit PD1 permits the connection of a flashlight with or without intermittence. If the flashlight is equipped with an inner intermittence effect, it is necessary to select the option "Si", but if it has no inner intermittence, it is necessary to select the option "no" in order to make it flash.

- Press the keys UP or DOWN until the display shows **in.LP**
- Press the MENU key, the display shows one of the 2 writings:
 - no** if the flashlight has no inner intermittence
 - Si** if the flashlight has internal intermittence
- Set the wished functions pressing the UP or DOWN keys.
- Press the MENU key to confirm, on the display will appear: **in.LP**.

TIMER FUNCTION

This function permits to program the time bands of opening and closing. It is necessary to connect a 24h timer with a contact normally open in parallel with the START or PEDESTRIAN START input. When the timer contact is closed, the gate gets into opening phase and remains opened until the contact of the timer opens causing the re-closing of the gate.

IMPORTANT: for a correct functioning it is necessary to activate the automatic closing (menu Ch.AU.)

- Press the keys UP or DOWN until the display shows **oroL**
- Press the MENU key, the display shows one of the 2 writings:
 - no** the clock function is not activated
 - Si** the clock function is activated

- Set the wished functions pressing the UP or DOWN keys.
- Press the MENU key to confirm, on the display will appear **oroL**.

MOTOR ANTI-SKID

The anti-skid function prevents that the repeated interruption of the opening and closing cycle causes delays in the cycle completion.

Example: $t.AP1 = t.AP2 = 25 \text{ s}$

$t.CH1 = t.CH2 = 26 \text{ s}$

The command START opens the gate, after 10 s. The command STOP closes it. The next START recloses the gate for 26 seconds, that is 16 seconds more than necessary. This could cause the motor overheating. The antiskid function eliminates the extra time and warrants the complete conclusion of the cycle, thanks to the adjustment of the time **t.AAS**.

This is an additional time in opening and in closing, adjustable from 0 to 120 seconds ($\pm 0,5$).

- Press the keys UP or DOWN until the display shows **ASM**
- Press the MENU key, the display shows one of the 2 writings:
 - no** the antiskid function is not activated
 - t.AAS** the antiskid function is active, with an additional time in opening and in closing adjustable from 0 to 120 seconds.
- Set the wished functions pressing the UP or DOWN keys.
- Press the MENU key to confirm.

If the function is **t.AAS**, on the display will appear **2.0**

- Set the wished time pressing the UP or DOWN keys.
- Press the MENU key to confirm, on the display will appear **ASM**.

If the function is no, on the display will appear: **ASM**.

INPUT PHOTO 1

This input can be activated for the connection of two different safety devices: the photocell or the rib. The rib (contact normally closed) is an active safety device in opening and closing (now active during the backlash): its intervention during the opening phase stops the gate, inverts the motion for 4 s, without offsetting the doors. On the other hand, the intervention of the rib in closing phase stops the gate, inverts the motion with the offset of the doors. The photocell 1 (contact normally closed) is an active security in opening and closing: the intervention of the photocell during the closing stops the gate, at its disengagement the gate inverts the motion: Differently the intervention of the photocell in opening stops the gate, at its disengagement the gate starts opening again.

It is necessary to install the photocell 1 properly, in order to cover the action space of the gate.

- Press the UP or DOWN keys until the display shows **Fot 1**
- Press the MENU key, the display shows one of the 3 writings:
 - no** the opening of PHOTO1 is not available
 - APCh** the opening of PHOTO 1 is available for the connection of the photocell
 - Cost** the opening of PHOTO 1 is available for the connection of the rib.
- Set the wished functions pressing the UP or DOWN keys.
- Press the MENU key to confirm, on the display will appear **Fot 1**.

INPUT PHOTO 2

The photocell 2 is active in closing: if it is dimmed during the closing it stops the gate and inverts the motion. The option CFCh activates the photocell even when the gate is still: closed gate means that no impulse has been given, either it is in pause or it has received a STOP command. In this case through all the time of the darkening of the photocell the control unit does not receive any command of activation at any opening / closing cycle.

- Press the UP or DOWN keys until on the display appears **Fot 2**

- Press the MENU key, the display shows one of the 3 writings:
 - no** the input PHOTO 2 is not available
 - CFCh** the input PHOTO 2 is available: the photocell is active in closing and also when the gate is still
 - Ch** the input PHOTO 2 is available: the photocell is active only during the closing
- Set the wished functions pressing the UP or DOWN keys.
- Press the MENU key to confirm, on the display will appear **Fot 2**.

INPUT STOP

This menu permits to select the functions associated to the command of STOP.

- Press the UP or DOWN keys until on the display appears **StoP**
- Press the MENU key, the display shows one of the 3 writings:
 - no** the input STOP is not available
 - ProS** the input STOP stops the gate: pressing the command START the gate continues the motion
 - invE** the command STOP stops the gate: at the next START the gate starts moving in the opposite direction.

NOTE: During the pause STOP stops the gate: pressing the command START will always re-closing the gate.

- Press UP or Down to select the wished function.
- Press menu to confirm. the display shows **StoP**.

RADIO INPUTS

To each memorized code one of the available four radio inputs is associated, in order to give the control unit the wished command; furthermore with simple and fast operations it is possible to carry out the partial or total clearing of the codes present in memory.

The connection of a modular super heterodyne receiver, allows the use of the four radio channels, tEL1 tEL2 tEL3 tEL4, to each a command of the control unit is associated:

- tEL1** START: transmitting the code associated to tEL1, the control unit receives a START
- tEL2** PEDESTRIAN START: transmitting the code associated to tEL2, the control unit receives a PEDESTRIAN START
- tEL3** STOP: transmitting the code associated to tEL3, the control unit receives a STOP
- tEL4** COURTESY LIGHTS: transmitting the code associated to tEL4, the control unit activates the COURTESY LIGHTS output.

INSERTING THE WISHED CODES INTO THE MEMORY

To memorize the wished TX codes follow carefully the instructions.

- Press the UP or DOWN keys and select the wished radio input, the display will show (Example) **tEL1**
- Press the MENU key, the display will show **trAS**

The control unit is ready for the radio learning

- Press the wished remote control key until the display shows **rEC**
- Release the remote control key

The control unit is now ready to learn new codes.

SUBSTITUTION OF A SINGLE CODE

To substitute a single code already memorized, it's sufficient proceed as explained above.

END OF PROGRAMMING

This menu allows to finish the programming (both default and personalized) saving the modified data into memory.

- Press the UP or DOWN keys until on the display appears **FinE**
- Press the MENU key to confirm, one of the following will appear on the display:
 - no** further corrections to carry out: do not quit the programming
 - Si** end of programming
- Press the UP or DOWN keys to select the wished function.
- Press the MENU key to confirm

If the function is **no**, on the display will appear: **FinE**. By pressing UP or DOWN you can scroll the menus to make modifications.

If the function is **Si**, on the display will appear the control panel.

THE INSERTED DATA HAVE BEEN MEMORIZED: THE CONTROL UNIT IS READY TO BE USED.

WARNING LIGHT DESCRIPTION

The warning light shows in real time the state of the gate:

STOP	light off
IN PAUSE	light always on
DURING OPENING	the light flashes slowly (2 Hz)
DURING CLOSING	the light flashes rapidly (4 Hz)

FUNCTION TABLE PD1

DISPLAY	DATI	DESCRIPTION	DATI DI DEFAULT	MEMO DATI
def	no / si	Load V2 ELETTRONICA standard data	no	
t.AP 1	0 - 120 s	Gate 1 opening time	22.5	
t.AP 2	0 – 120 s	Gate 2 opening time	22.5	
t.aPP	0 – t.AP1	Opening time of pedestrian gate	6.0	
t.Ch 1	0 – 120 s	Gate 1 closing time	23.5	
t.Ch 2	0 – 120 s	Gate 2 closing time	23.5	
t.ChP	0 – t.Ch1	Closing time of pedestrian gate	7.0	
t.C2P	0 – t.ChP	Closing time gate 2 during pedestrian cycle	0.0	
r.AP	0 – 120 s	Gate delay during opening	1.0	
r.Ch	0 – 120 s	Gate delay during closing	3.0	
t.SEr	0 – 120 s	Lock time	3.0	
t.ASE	0 – t.SEr	Lock advance time	0.0	
t.inv	0 – 120 s	Backlash time	0.0	
t.PrE.	0 – 120 s	Pre – flashing time	1.0	
t.rAL	0 – 120 s	Slowing down time	0.0	
t.CvE	0 – 120 s	Fast closing time after slowing down during closing	0.0	
Pot	30 ÷ 100%	Motor power	40	
SPUn	no / si	Start off	si	
St.AP	no ChiU PAUS	Start in opening - Start command is not available - Cmmand close gate - Stop the gate and goes in pause	PAUS	
St.Ch	StoP APer	Start in closing - Start command stop the gate - Start command open the gate	StoP	
St.PA	no ChiU	Start in pause - Start command is not available - Start command closes the gate	ChiU	
SP.AP	no ChiU PAUS	Pedestrian in opening - Pedestrian start command is not available - Pedestrian start command closes the gate - Gate goes in pause	PAUS	

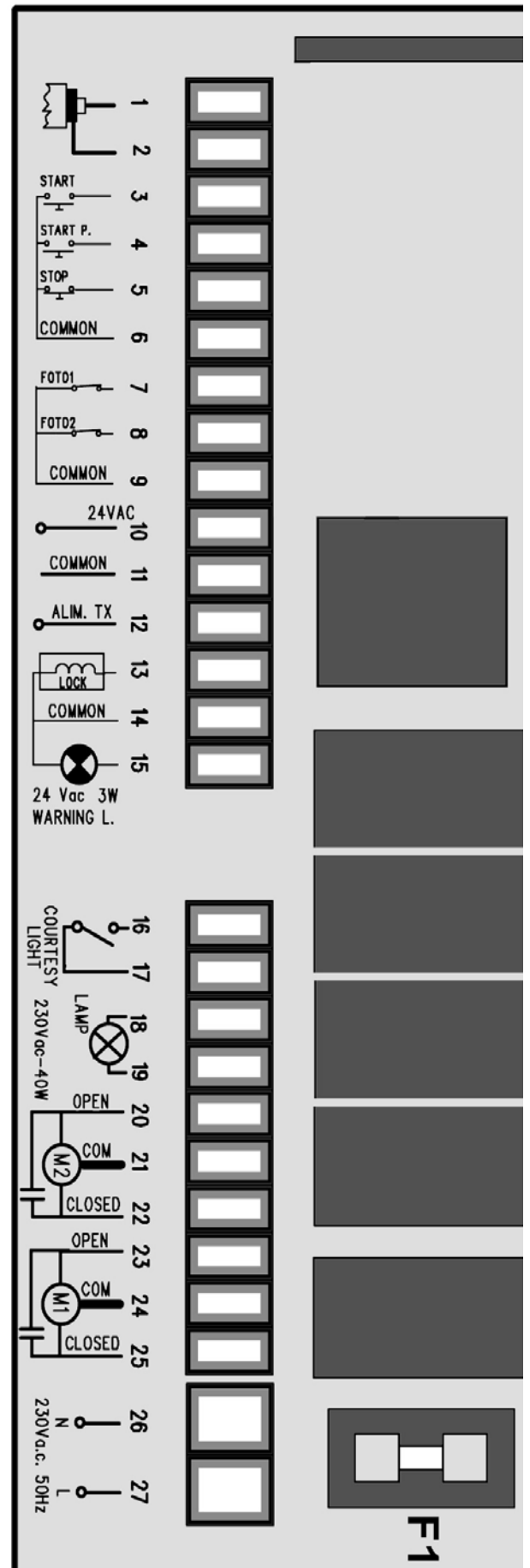
Ft.PA	rPAU t.PCh	Photocell in pause - Pause time richarged - Gate stop for a time to be set between 0 to 120 s	rPAU	
Ch.AU	no t.PAU	Automatic closing - Automatic closing not available - Reclosing is available, the standstill time is set from 0 to 999 s	no	
LUCi	CiCL t.LUC AUS timer bSt Mon	Courtesy Light - Lights are on trough the whole cycle - Lights start time adjustable from 0 to 999 s - Auxiliary output - Timed aux out (from 0 to 999 s) - Aux out relay with bistable fonctionning - Aux out relay with monostable fonctionning	t.LUC = 60 s	
LP.PA	no / si	Flashlight in pause	no	
In.LP	no / si	Flashlight with intermittence	no	
OroL	no / si	TIMER function	no	
ASM	no t.AAS	Motor antiskid - Antiskid function is not active - Antiskid function active with additional opening / closing time adjustable from 0 to 120 s	t.AAS = 2.0 sec.	
Fot 1	no APCh CoSt	Input PHOTO 1 - Not available - input is available for the connection of the photocell - Input is available for the connection of the rib	no	
Fot 2	no CFCh Ch	Input PHOTO 2 - Not available - Input available : photocell is active in closing and also when the gate is still - Input available : photocell active during the closing	CFCh	
StoP	no invE ProS	Input STOP - Input STOP not available - STOP command stops the gate: START command starts moving in the opposite direction - Input STOP stops the gate: pressing the command START gate continues the motion	no	
tEL1		Radio input associated to START command		
tEL2		Radio input associated to Ped. START command		
tEL3		Radio input associated to STOP command		
tEL4		Radio input associated to courtesy light		
FinE	no / si	End of programming	no	

TERMINAL CONNECTION



In order to facilitate the connections, the PD1 control unit is equipped with two entirely removable terminal blocks.

CONNECTORS	CONNECTION
1.	Antenna
2.	Antenna shield.
3.	Opening control for the connection of: control devices with normally open contact. Contact normally open.
4.	Opening controls for pedestrian access for the connection of: control devices with normally open contact. Contact normally open.
5.	Stop command. Contact normally closed.
6.	Common (-).
7.	Photoelectric cell 1. Contact normally closed.
8.	Photoelectric cell 2. Contact normally closed.
9.	Common (-).
10.-11.	Power output 24 Vac for photoelectric cells and other accessories.
12.	UNUSED
13.-14.	Electric lock or bolt 12 Vac.
14.-15.	Warning light 24 Vac 3W.
16.-17.	Contact for area lighting 230 Vac 10 A
18.-19.	Flashing light 230 Vac 40 W.
20.	Power output 230 Vac for motor 2 in opening phase.
21.	Common motor 2.
22.	Power output 230V for motor 2 in closing phase.
23.	Power output 230 Vac for motor 1 in opening phase.
24.	Common motor 1.
25.	Power output 230 Vac for motor 1 in closing phase.
26.	Neutral 230Vac.
27.	Power phase 230 Vac.



TECHNICAL SPECIFICATIONS

Power supply	230 Va.c. 50 Hz
Max motors load	700 W
Max accessories load powered 24 V	10 W
Working temperature	-20°C / 60°C
Protection fuse	F1 = 5 A for line 230 Va.c.
Dimensions	275 x 210 x 100 mm
Weight	1600 g
IP protection	55

INSTRUCTIONS FOR THE INSTALLATION



The installer must provide for a device (es. magnetotermical switch) ensuring the omni polar sectioning of the PD1 equipment from the power supply.

The standards require a separation of the contacts of at least 3 mm in each pole (EN 60335-1).

The equipment is designed for non enclosed installations.

For the connection of stiff or flexible tubes and fasteners, use connectors according to IP55 protection grade.

CONFORMITY TO REGULATIONS

V2 ELETTRONICA S.p.a. declares that PD1 is in conformity with the provisions of the followings 93/68/EEC, 73/23/EEC, and that the standards referenced here below:

ELECTRICAL SAFETY	EN 60335 – 1
ELECTROMAGNETIC COMPATIBILITY	EN 50081 – 1 EN 50081 – 2

Racconigi, 15 / 10 / 01

V2 ELETTRONICA legal representative.

A.Livio Costamagna