## ELECTRONIC CONTROL UNIT MC41SP NEW



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Electronic control unit for the automation of sliding or sectioned doors with limit switches, with soft start/stop funcion and built-in radio receiver


## Terminal board connections:

1e2-24V DC Line input
3 e 4 - Motor power supply output (+MOTOR-)
5 e 6 - Backup battery $24 v$ (+BAT-)
7 - Common (Limit switches)
8 - Closing limit switch input (CLLT)
9 - Opening limit switch input (OPLT)
10 - Accessories power supply output terminal(+24V)
11 - Contact Photocells (PE)
12 - Accessories power supply output terminal OV (GND)
13 - Open/close command button input
14 - Accessories power supply output terminal OV (GND)
15-24V 5W max. Flashing Beacon output (FLASH)
16 - Accessories power supply output terminal OV (GND)


17 - Antenna

## Programing the Logic Board

P button - Programming
A button - Increase
D button - Decrease
C button - Programming Transmitters
1 - When you connect the electricity to the Logic Board, the digital screen will display numbers from 99 to 11 in turn. At the same time, the lamp will go off after 2 seconds. When the opener is in standby situation, LED displays (-ロ)

2 - When the door is opening, LED displays OP.
When the door is closing, LED displays CL.
Note: If an exterior flash lamp is connected, it will flash for caution when the door is moving and the circular sequence of the control of transmitter or wall switch: open - stop - close - stop.

## 3 - Functions on the menu

There are 7 functions on the control board as following:
P1: The setting of the power when Opening (1-9)
P2: The setting of the power when Closing(1-9)
P3: The setting of the photocells (On/Off)
P4: The setting of automatic closing of the door (time from 10 to 90seconds)
P5: The setting of automatic closing of the door (On/Off)
P6: The setting of the working time - autoprogramming
P7: The setting of the Pedestrian working time (0 to 10)
The choice of the function on the menu is made by pressing A or $D$ key (the operation is not circular and each time you press a key you move one level up or down on the menu).

When the non-operation on all functions' setting except for function P 1 is over 20 seconds, the system will automatically quit from the setting status.

## P1-Setting opening force.

1.1 - Press and remain on the $P$ key 4 seconds and LED displays $P 1$. Access $P 2$ by pressing the $A$ key. Then press the $P$ key for 2 seconds and LED displays the current power-grade. To set opening force use the A key or $D$ key. There are 9 grades of the power from F1(min.) to F9 (max).
Once the grade of power is approved, press the $P$ key for 2 seconds and the system quits from the opening force setting of the reverse power. Finally, the system Returns to the stand-by situation ( $=\boldsymbol{m}$ ).
1.2 - The original setting of power-grade: F2

## P2-Setting closing force.

2.1 - Press and remain on the $P$ key 4 seconds and LED displays P1. Access P2 by pressing the A key. Then press the $P$ key for 2 seconds and LED displays the current power-grade. To set closing force use the A key or D key. There are 9 grades of the power from F1(min.) to F9 (max).
Once the grade of power is approved, press the $P$ key for 2 seconds and the system quits from the opening force setting of the reverse power. Finally, the system Returns to the stand-by situation ( $\boldsymbol{m}$ ).
2.2 - The original setting of power-grade: F2

## P3 - The setting of the photocell

3.1 - The orginal setting: photocell is unworkable.
3.2 - Press and remain the $P$ key 4 seconds. At the same time, LED displays P1. Access P3 by pressing the A key. Then press the P key for 2 seconds and LED displays the current status H 1 (photocell is workable) or H0 (photocell is unworkable). Press A or D key to select the desired function. Press the $P$ key for 2 seconds and the system quits from the setting of the photocells, returning to the stand-by situation ( $\boldsymbol{\square} \boldsymbol{\square}$ ).

## 4 - The setting of the automatic closing time

4.1 - Press and remain on the P key 4 seconds and LED displays P1. Access P4 by pressing the A key. Then press the $P$ key for 2 seconds and LED displays the current status. The time of automatic closing can be adjusted from 10 seconds to 90 seconds by pressing the A key or D key.
Once the time of the automatic closing is approved, press the $P$ key for 2 seconds and the system quits from the setting of the automatic closing, returning to the stand-by situation ( $\boldsymbol{m}$ ).

## P5 - The setting of the model of the automatic closing

5.1 - Press and remain the P key till LED displays P1 and access to P5 by pressing A key. Then press the P key to display the current situation. Press A key to access B1 or D to access B0. Finally, press P key to confirm the choice. Then back the stand-by situation ( $=\boldsymbol{\square}$ ).

B0: The automatic-closing does not work. The transmitter can stop the opening door. The stopped door will go downward (close). The closing door will go reversely.
The mode sequence: opening - stop- closing- openning.
B1: The automatic-closing will work at the any position after the set time. For the opening door, the transmitter can not work. After pressing the transmitter, the fully opened door will close. The closing door will go reversely after pressing the transmitter.

## P6 - The setting of the working time - Autoprogramming

6.1 - With the gate closed and limits switch installed in place, press and remain on the $P$ key 4 seconds and LED displays P1. Access P6 by pressing the A key. Then press the P key for 2 seconds. Gate will open and close automatically. Once the working time settled, press the $P$ key for 2 seconds and the system quits from the working time setting, returning to the stand-by situation ( $\boldsymbol{-}$ - ) .

## P7 - The setting of the Pedestrian working time

7.1 - Press and remain on the P key 4 seconds and LED displays P1. Access P7 by pressing the A key. Then press the $P$ key for 2 seconds and LED displays the current status. The Pedestrian working time can be adjusted from 0 to 10 seconds by pressing the A key or D key.
Once the pedestrian working time is approved, press the $P$ key for 2 seconds and the system quits from the working time setting o, returning to the stand-by situation ( $=$ ).

## Programming transmitters or delete existing ones using $\mathbf{C}$ key

Press the C key until digital screen shows SU. Press and release key (1,2 or $4-$ Fig.1) of the transmitter you want to add. Then repress the same key till SU flashes quickly. Once the flash stops, the code-matching is successful. Note: Key 3 will automatically be programmed for pedestrian openning.
Repeat this operation every time you want to add more transmitters.
The clearance of the code: press and remain on the C key over 8 seconds to delete all the codes, the digital screen shows DL.

If the digital screen shows a flash FU means the memory space is full and it can not fill more transmitters. If you want to input more codes under a full situation, all previous 30 codes have to be deleted.
Memory Capacity : 30 Transmitters.
The Logic Board is compatible with Rolling Code transmitters.

## Connecting scheme - MC41SP NEW



|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Portuguese | Transformador | Bateria | Motor | Pirilampo | Botão de pressão ou selector de chave | Fins de curso | Fotocélulas interiores |
| Deutsch | Transformator | Batterie | Motor | Blinklamp | Push-button oder Walschalter | Endanschläge | Interior fotozellen |
| Spanish | Transformador | Batería | Motor | Destellante | Pulsador o selector | Fins de curso | Interior fotocélulas |
| English | Transformer | Battery | Motor | Glow-worm | Push-button or selector switch | End of course | Internal photocells |
| Français | Transformeur | Batterie | Moteur | Clignotant | Bouton-poussoir ou sélecteur | Arrêts d'extrémité | Internal photocellules |
| Italian | Transformatore | Batteria | Motore | Lampeggiante | Premere il pulsante o selettore | Fine ferma | Interno fotocellule |

