



# KIBO PRO SELECTOR

I N S T A L L A T I O N M A N U A L

We would like to thank you for choosing this product. In order to obtain the best performance from the automatism, Aprimatic recommends that you carefully read and follow the installation and use instructions provided in this manual. The installation of this automatism must be performed only by professionally qualified personnel to whom this manual is directed. Any errors in the installation phase may be dangerous for persons or objects. The packaging material (wood, plastic, boxes, etc.) should not be disposed of in the environment or left within the reach of children, as it is potentially dangerous. Each individual phase of the installation must be performed in conformity with the current regulations and, in any case, according to the dictates of general good practices. Ensure, before beginning the installation, that the product is integral and has not been damaged during transport or from improper storage. The product absolutely must not be installed in environments with inflammable gases, vapors or fumes. Record on each installation the identification data of the motorized door. Verify that the electrical system upstream is correctly dimensioned and has all the suitable protections (differential switch and overload protection). When performing maintenance or repair, use only the original spare parts. Do not tamper with or alter for any reason the internal equipment of the device and all the safeties provided in the control unit. The manufacturer accepts no responsibility in the event that the internal parts of the automatism are altered or tampered with or if safety devices are used in the system other than those indicated by the manufacturer. The installer of the automatism is obligated to provide the manager of the automated entrance with the use manual and all the information necessary for the correct use in automatic operation, manual operation (also in the case of electric locking) and in emergencies. This device has been exclusively designed for the control of automatisms for swinging doors produced by APRIMATIC. Any other use will be considered contrary to the use provided for by the manufacturer that, therefore, cannot be held responsible.

## Machines directive

According to directive 98/37/EC, the installer that motorizes a door becomes the builder of the automatic door machine and must:

- Prepare the Technical File with the documents indicated in Annex V of the Machines Directive and conserve it for at least 10 years.
- Write up the EC declaration of conformity according to Annex II-A of the Machines Directive and deliver a copy to the user.
- Affix the EC mark on the motorized door according to point 1.7.3 of Annex I of the Machines Directive.

## Directive of conformity for machines

(Directive 98/37 CE, Annex II, parte B)

**Manufacturer:** Aprimatic S.p.A.  
**Address:** V.L.da Vinci 414 - 40059  
 Villafontana di Medicina BO - ITALY

Declares that the product **KIBO PRO**

- has been built to be incorporated in a machine or to be assembled together with other machinery in order to construct a machine considered by the Directive 98/37 EC, as modified;
- thus it does not satisfy all points of the dispositions of this Directive as it is not yet assembled with the other components.
- satisfies the conditions of the following other EC Directives:
- 89/336/EEC Electromagnetic Compatibility and subsequent amendments
- 2006/95/CE Low Voltage and subsequent amendments
- and also declares that the machinery is not allowed to be put into service until the machine in which it will be incorporated or of which it will become a component has been identified and has been declared to satisfy the conditions of the Directive 98/37 EC and the corresponding national legislation.

Villafontana di Medicina, 06/09/2007

**Dott. Alessandro Minelli**  
 (Amministratore)

## Fastening and arrangement of the casing

The KIBO PRO Selector has been designed to be connected with APRIMATIC automatism (OVER - OVER PLUS). It is usually fastened to a suitable support near the automatic entrance.

To perform the fastening to a wall proceed as follows:

- Dismount the selector by unscrewing the screws D Fig.2 that block the cover to the metal support.
- Insert the cable of connection with the automatism into the hole B Fig.1.
- Use the loops A Fig.1 to fasten the selector with appropriate screws, being careful that the connection terminal box is turned downwards.
- Position the cover by centering it on the appropriate supports C Fig.2 so that the led indicators are housed correctly in the appropriate seats. Pay particular attention to not damage the led indicators during the insertion.
- Insert the screws D Fig.2 through the slots of the cover E Fig.2 and then screw them into the threaded holes C Fig.2 until they graze the cover.
- Apply light pressure to the cover in the direction of the arrows of Fig.2 in order to guarantee a complete resting of the cover on the four spacers provided and simultaneously block the screws D Fig.2.
- Verify the correct operation of all the keys of the full selector: if problems appear, loosen the screws D Fig.2 and repeat the sequence for the mounting of the cover.

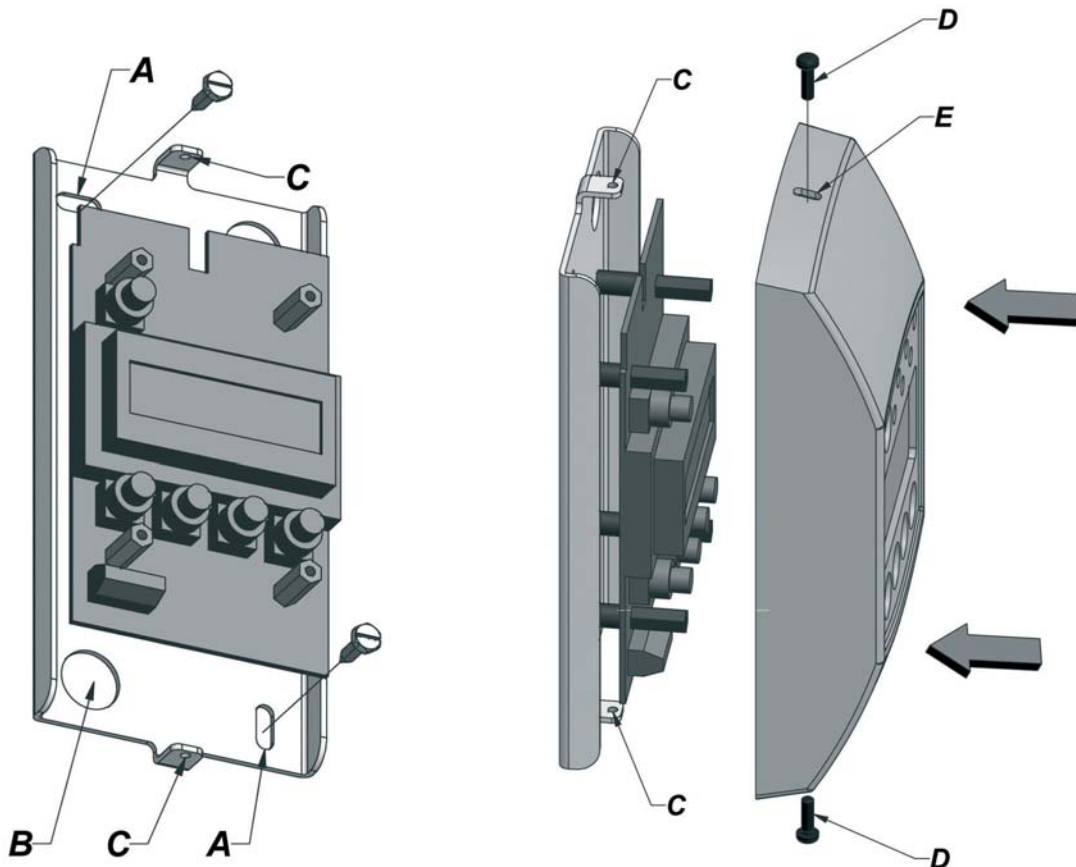
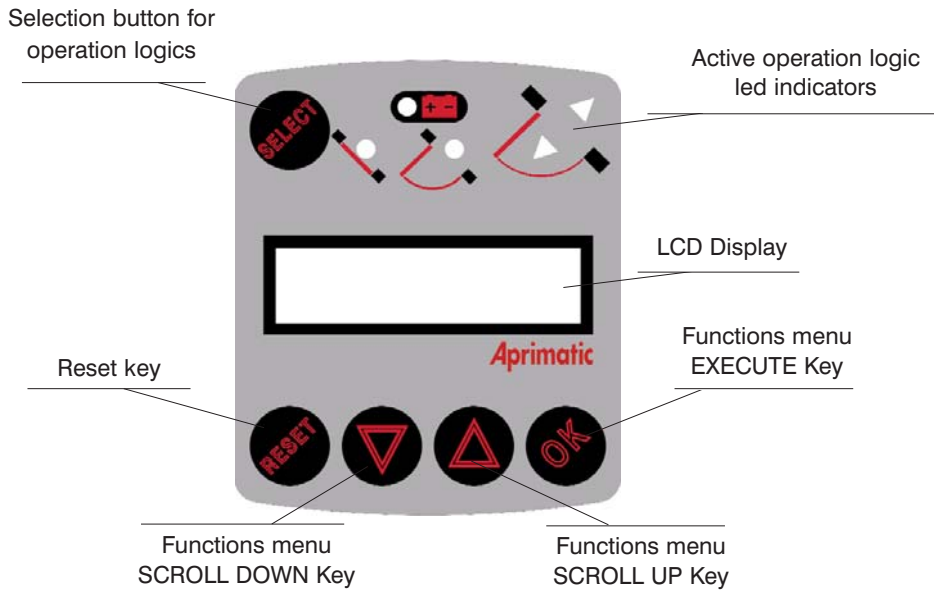


Fig.1

Fig.2

## Description



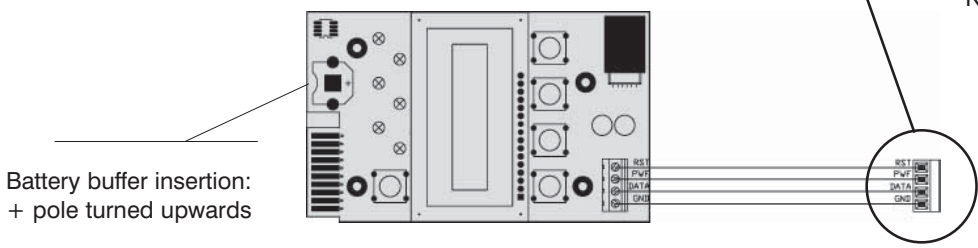
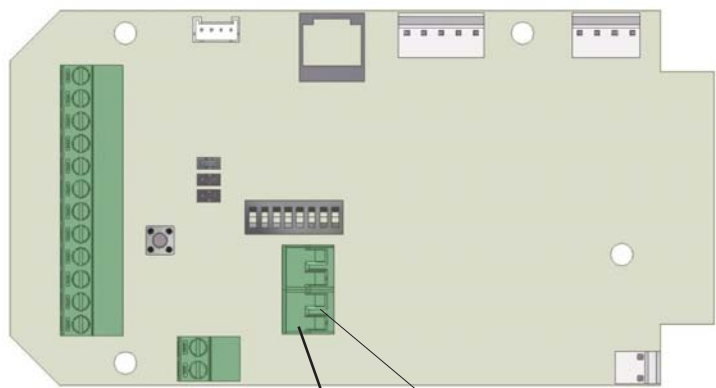
## Electric Connections

One advanced selector can be connected simultaneously to several electronic cards up to a maximum of 3. When the Multi Slave mode is active, every single door connected can be controlled individually. Several selectors can also be connected to a single door (there is no limit to their number).

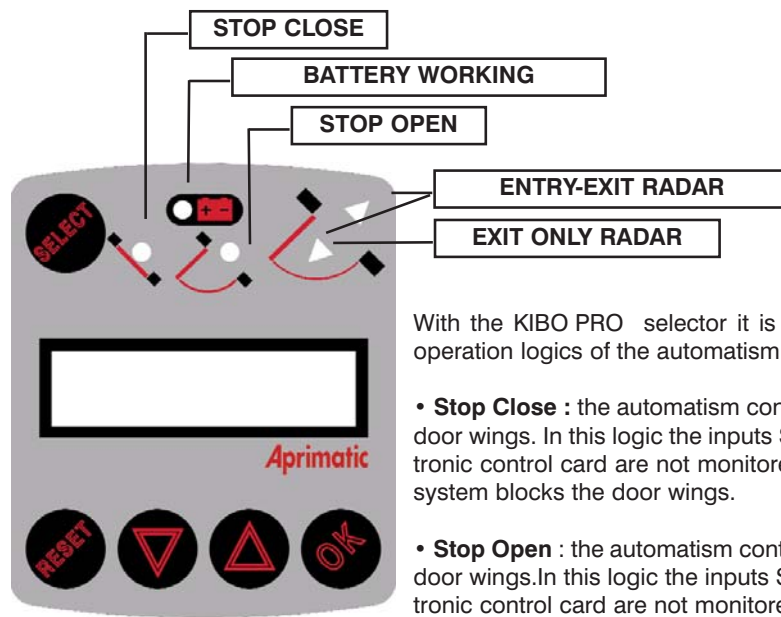
### CAUTION

Before performing the electric connections insert the battery buffer as indicated in the figure.

For the connection, use a screened cable with 4 wires of 0.22 mm (max. 50 m): connect the 4 internal conductors of the screened cable respecting the correspondences indicated by the screen print located both on the terminal box of the electronic main as well as on that of the multilogic selector. Do not connect the screen of the cable used.



## Use of the KIBO PRO selector



With the KIBO PRO selector it is possible to select the following operation logics of the automatism:

- **Stop Close** : the automatism controls the complete closure of the door wings. In this logic the inputs START1 and START2 of the electronic control card are not monitored; if present, the electric locking system blocks the door wings.
- **Stop Open** : the automatism controls the complete opening of the door wings. In this logic the inputs START1 and START2 of the electronic control card are not monitored.
- **Entry-exit radar** : both the inputs START1 and START2 of the electronic control card are monitored. A signal originating from a sensor connected to one of these inputs triggers the opening and consequent closing of the door wings. The electric locking system, if present, never blocks the door wings.

- **Exit-only radar**: only the input START 2 of the electronic control card is monitored. A signal originating from a sensor connected to this input triggers the opening and consequent closing of the door wings. The electric locking system, if present, blocks the door wings every time that these reach the position of complete closure

The led indicators indicate the logic currently active (led lit up). To change the logic press the SELECT key; each time the key is pressed the led corresponding to the various logics lights up in sequence. When the desired logic is reached, the led blinks for a few seconds; when the light remains on, the control card acquires the new logic.

- **Battery working** : logic not selectable  
led lit up : automatism battery-powered  
blinking display: exhausted battery

When the Multi Slave mode is active, and the operating logic must be changed, the user is asked on which door the change must be performed; a particular door can be chosen (select the door's corresponding number), or the change can affect all doors (choose the option "All").

## Functions menu

By means of the LCD display and the navigation keys it is possible for the user to move within the functions menu.



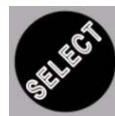
**SCROLL DOWN Key:** permits the user to scroll downward in the functions menu.



**RESET Key:** permits the user to cause the Reset of the control center and the KIBO PRO selector.



**SCROLL UP Key:** permits the user to scroll upward in the functions menu.

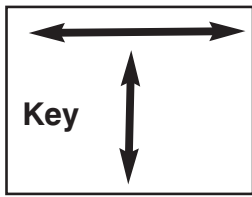


**SELECT Key :** permits the user to select the wished operating logic



**EXECUTE Key:** permits the user to conserve the selection chosen.

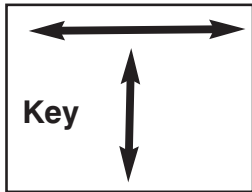
The menus are structured in a hierarchical manner, and thus each menu may contain submenus; each time the user exits from a submenu he enters the immediately previous menu in the hierarchical scheme.



Arrows of this type indicate that it is possible to scroll through the menu both with the SCROLL UP key and with the SCROLL DOWN key.

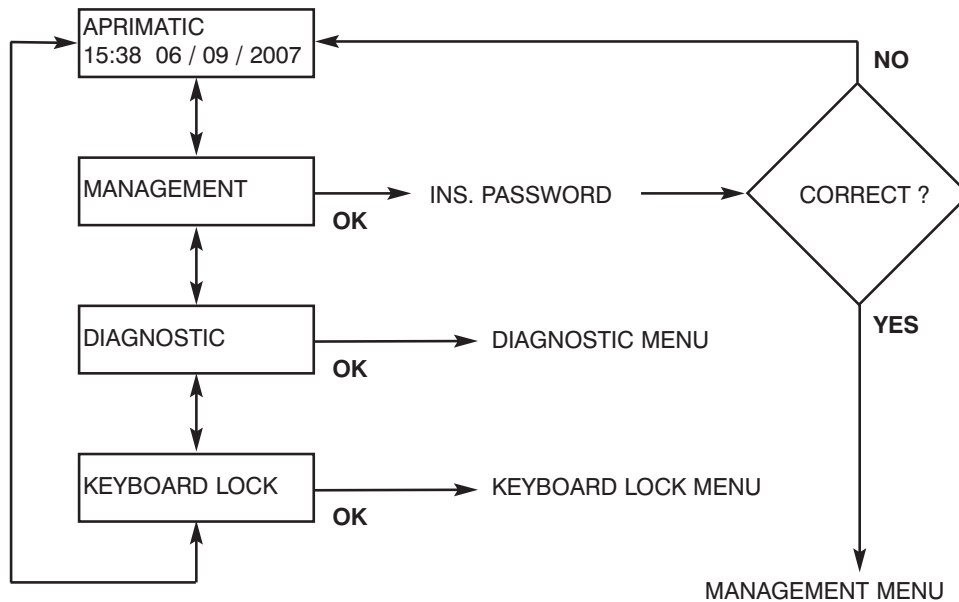


This means pressing the OK key.



Arrows of this type indicate that by pressing the OK key the user moves into a menu of a different hierarchical level.

**Main Menu**



Installer Password (universal) = 5392  
 Default Password (user) = 0000

**Management Menu (1)**

There are two different kind of password: the one for the final user, and the universal password normally used by the installer. The first by default corresponds to 0000 and can be changed through the Setting Menu; menus shown in gray in the charts are neither visible nor accessible with this password. The second password is 5392 and cannot be altered; with this password all menus are accessible.

To enter into the management menu it is necessary to input the user password:

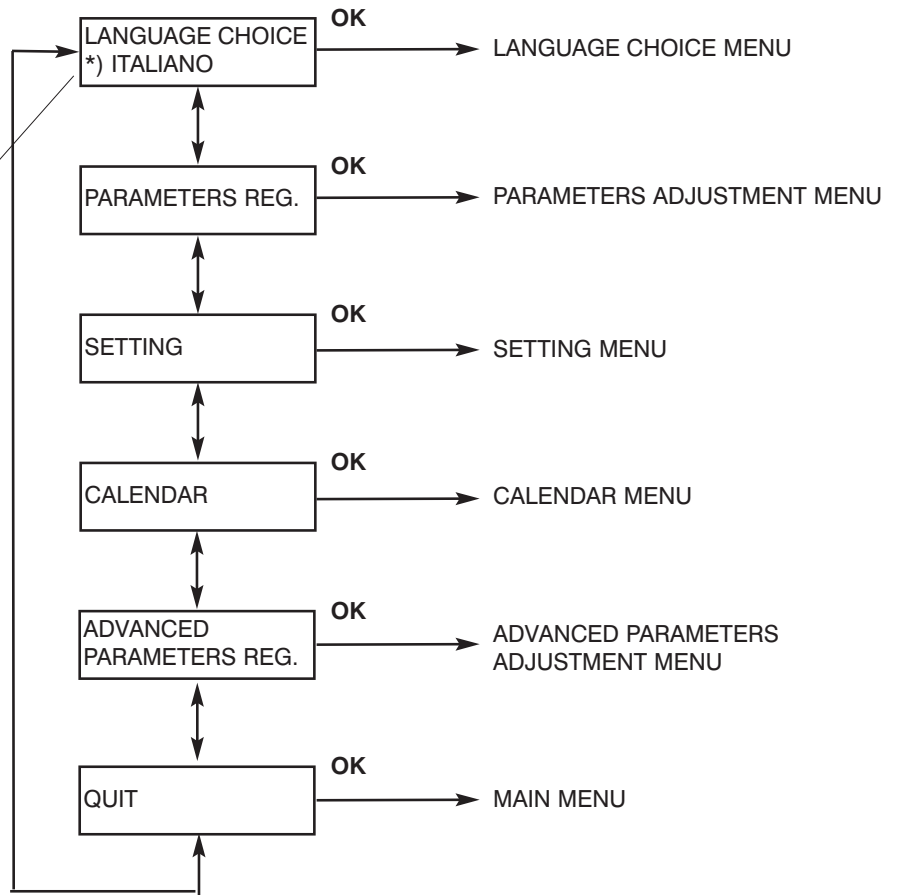
to input, for example, the password 5724 proceed as indicated in the figure:



To select the desired number use the SCROLL UP and SCROLL DOWN keys.  
 In Multi Slave mode, whenever the Management Menu is accessed, the user is asked to specify on which door he wants to operate, among those connected to the selector.

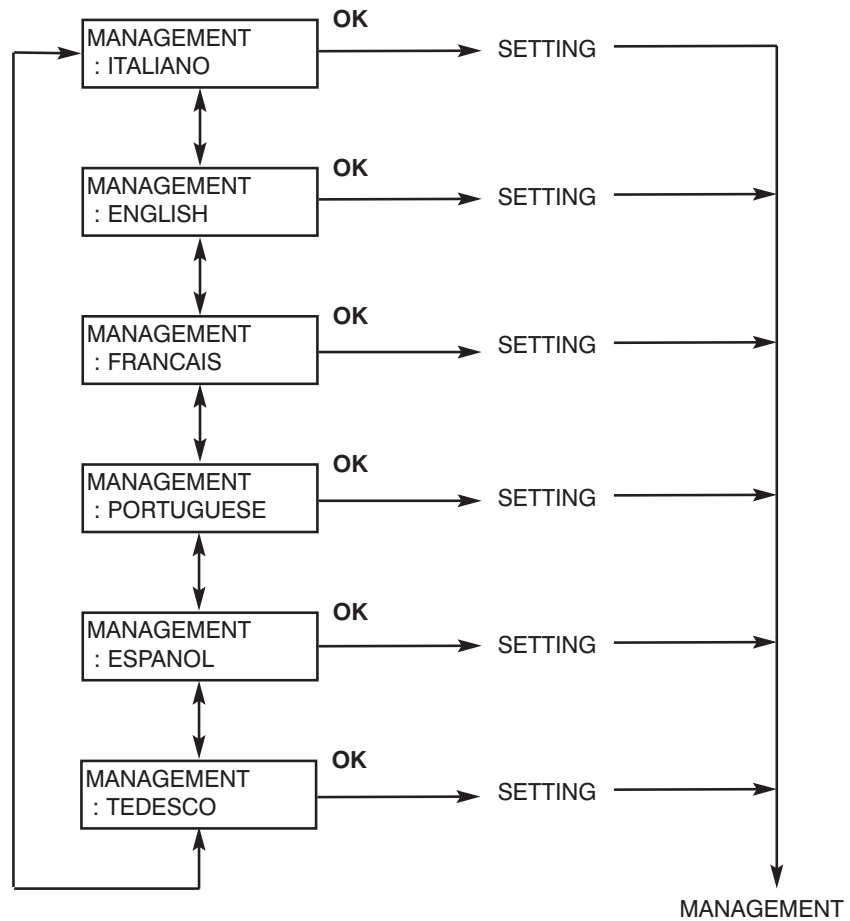
(Management Menu continued)

Indicates the value currently set



**Language Choice Menu (1.1)**

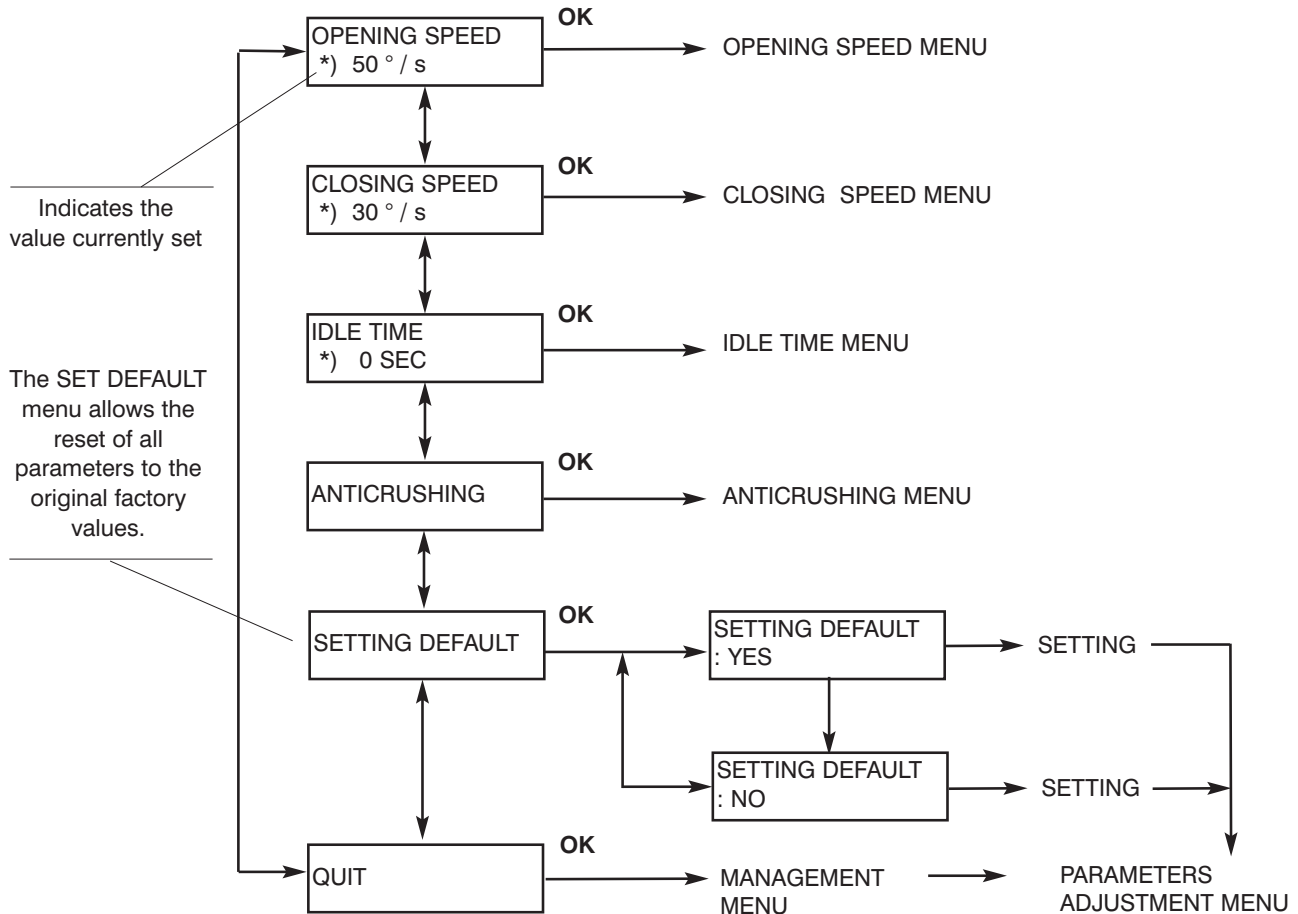
Permits the user to select the language used in the functions menu.



**Parameter Adjustment Menu (1.2)**

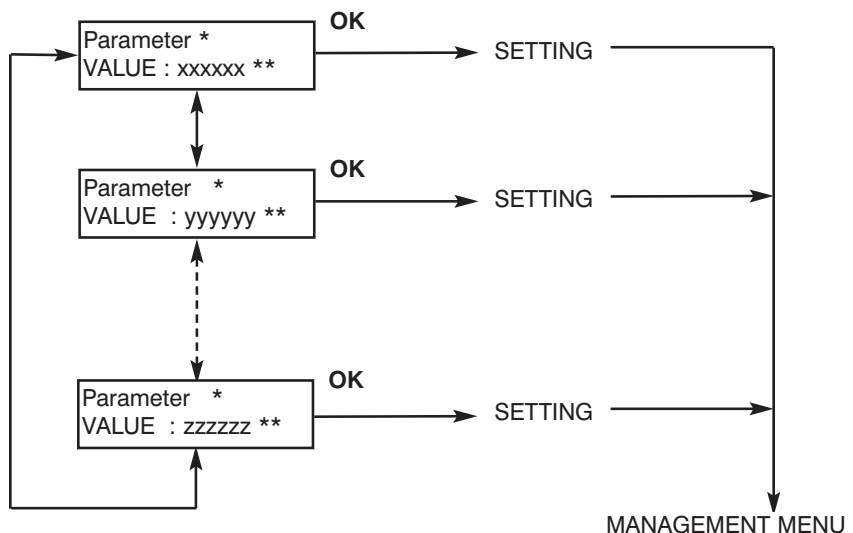
Permits the user to adjust some operational parameters:

- **Opening Speed.** Setting range 10 ÷ 50 °/sec. Default value 50 °/sec.
- **Closing Speed.** Setting range 10 ÷ 50 °/sec. Default value 30 °/sec.
- **Idle Time.** Represents the idle time after an opening manoeuvre before starting the closure. Setting range 0 – 120 sec. Default value 0 sec.
- **Anti-crushing.** Represents the anti-crushing sensibility . The values may be set separately for the opening (ANTICRUSH OP) and the closing (ANTI-CRUSH CL). Setting range 1 – 9. The lower values of this parameter correspond to higher sensibilities. Default opening 9, closing 5



The submenus for the settings are:

- \* Indicates the name of the parameter that is being adjusted.
- \*\* Indicates the value to be set.



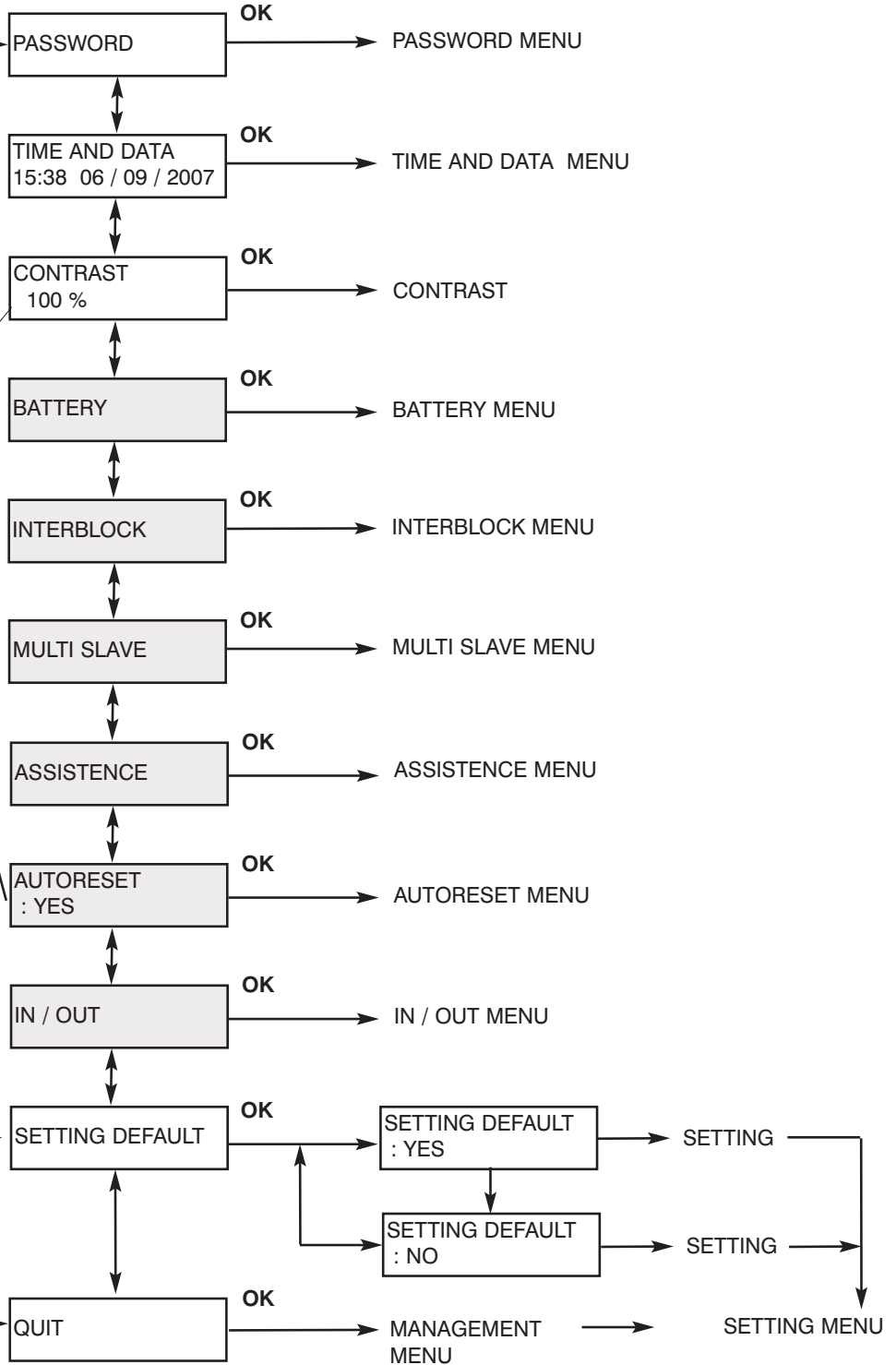
When the desired value has been reached press the OK key to set the new value.



**Set-up Menu (1.3)**

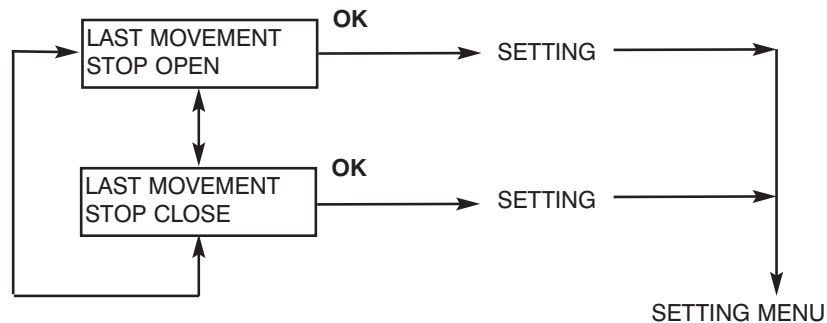
Indicates the value currently set

The SET DEFAULT menu allows the reset of all parameters to the original factory values.



**Battery Menu (1.3.1)**

When the control centre is battery powered and the power level is too low, it is necessary to stop the operation of the automation; with this menu it is possible to choose if the Stop position is a complete closure or a complete opening.



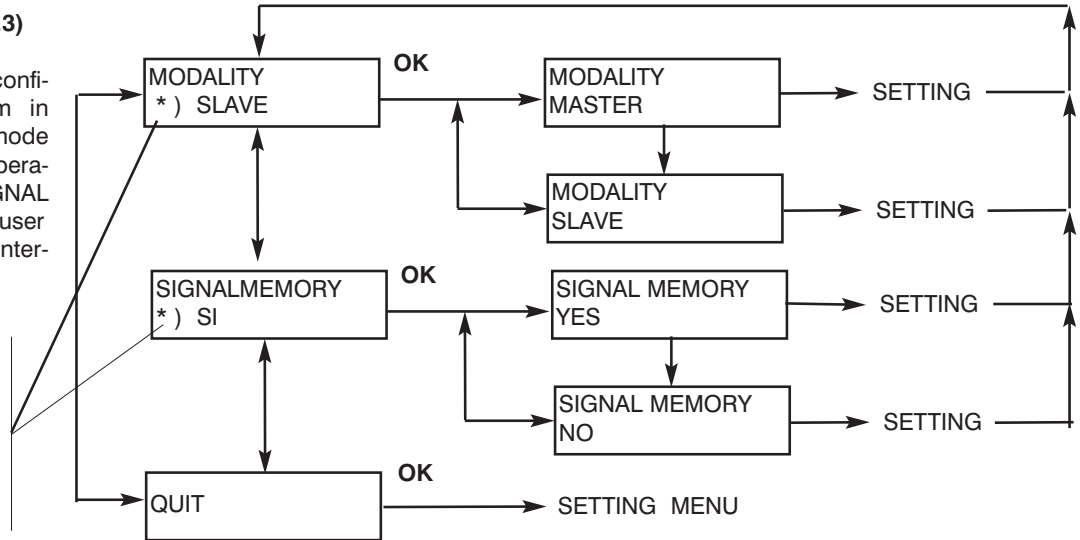
**Password Menu (1.3.2)**

Permits the user to modify the User Password. For the input logic see the Management Menu.

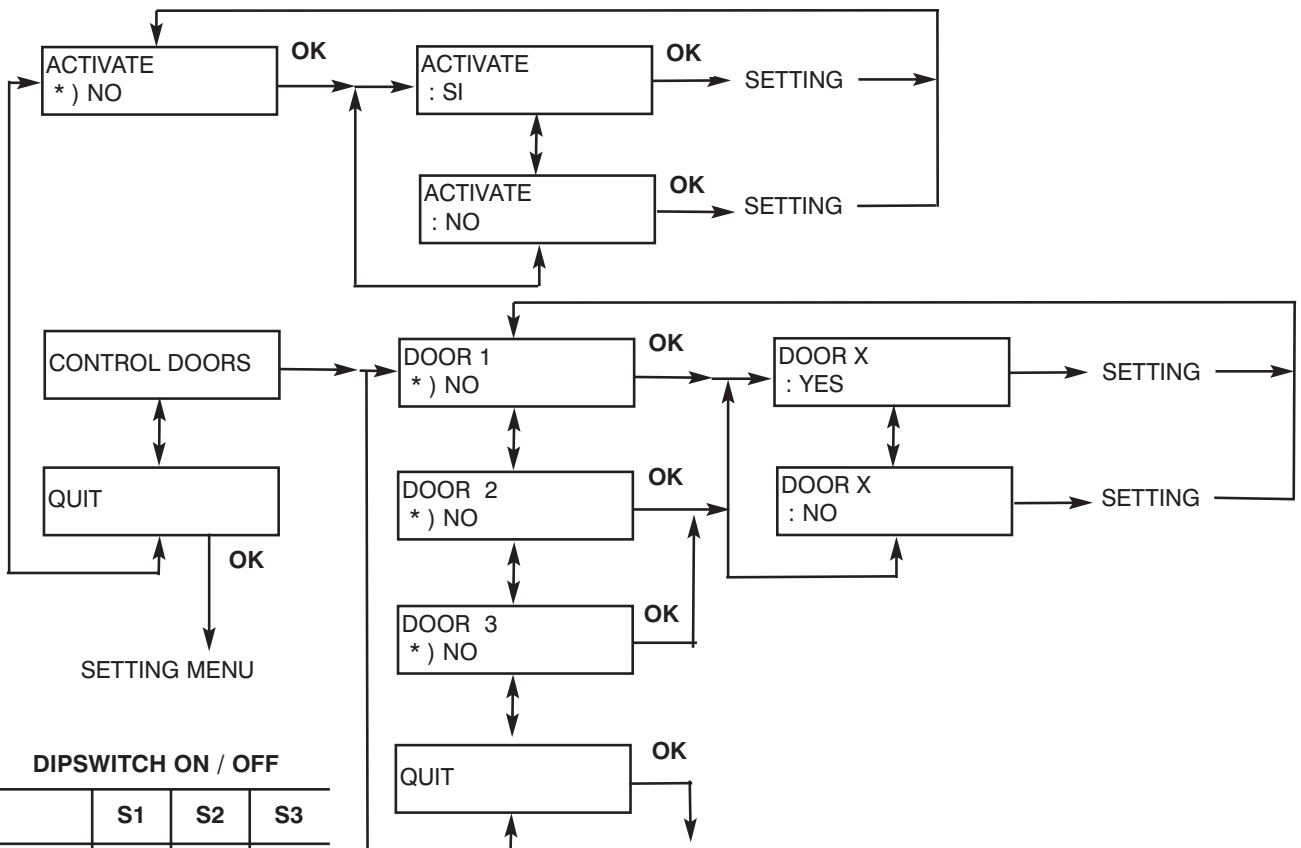
**Interlock Menu (1.3.3)**

Permits the user to configure the automatism in MASTER or SLAVE mode in the interlocked operation. The submenu SIGNAL MEMORY permits the user to use the special inter-block version.

Indicates the value currently set



**Multi Slave Menu (1.3.4)**



		DIPSWITCH ON / OFF		
		S1	S2	S3
Door	1	1	0	0
Door	2	0	1	0
Door	3	1	1	0

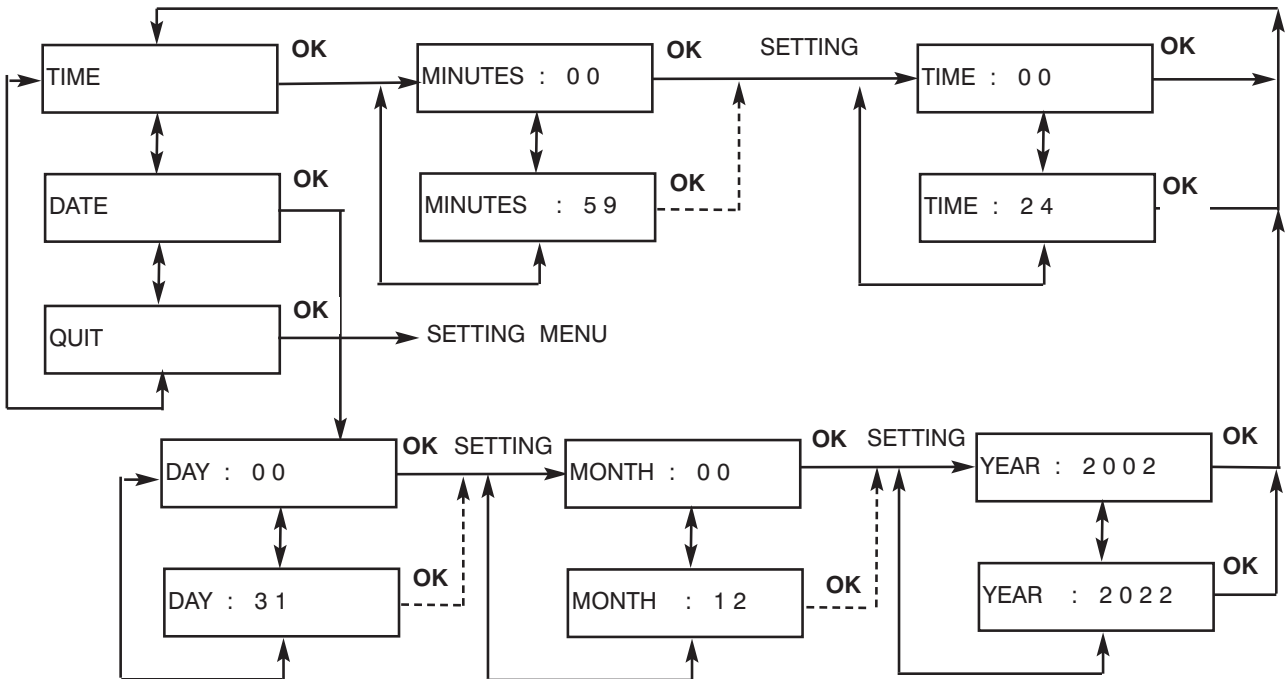
This menu permits to activate the multi slave mode, so that a number of different doors (up to a maximum of 3) can be controlled by a single selector. Once the multi slave mode is activated, it must be decided which ones and how many doors are connected to the selector. This can be done setting the Dip Switch located on the OVER or OVER PLUS electronic card, according with the table on this page.



Don't forget to correctly adjust each card as shown in the table and to use a different address for each card; otherwise multi slave mode will not work properly.

### Time and Date Menu (1.3.5)

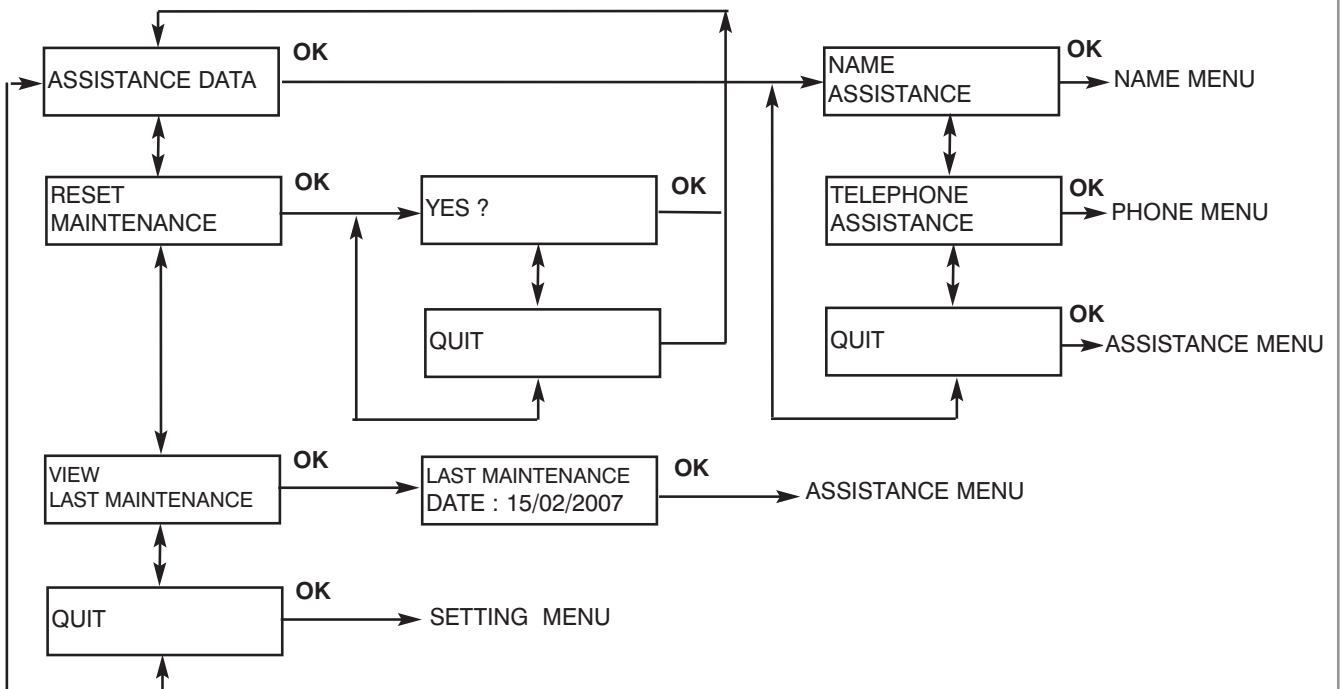
Permits the user to change the time and date settings..



### Assistance Menu (1.3.6)

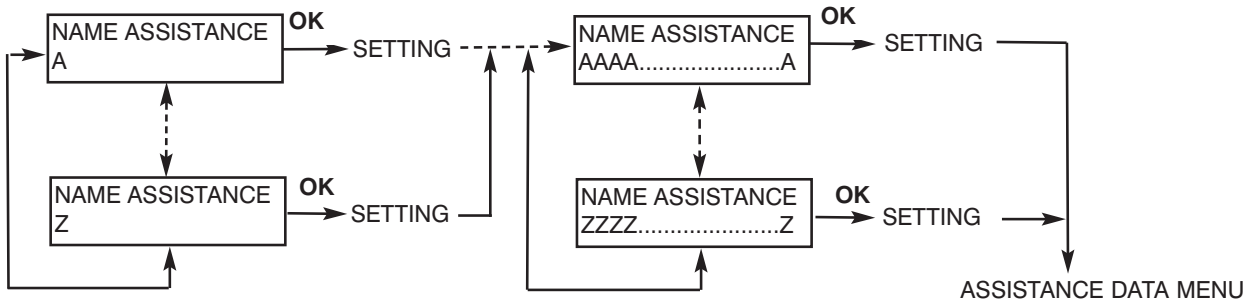
The KIBO PRO selector features the “assistance” function, which warns the user when it’s time to perform a scheduled maintenance routine on the automatism. The LCD display shows a request for maintenance once a certain (programmable) time is elapsed. In such cases the system’s continues operating normally: hitting any key will erase the display, but the request will reappear two days later. The request will disappear definitively only once the maintenance routine has been performed and the assistance function has been reset via the “Reset Maintenance” menu. The presence of this function together with the amount of time between two maintenance sessions can be set only by means of the OverWare PC connection software.

To access the service menu it is necessary to input the Installer Password.

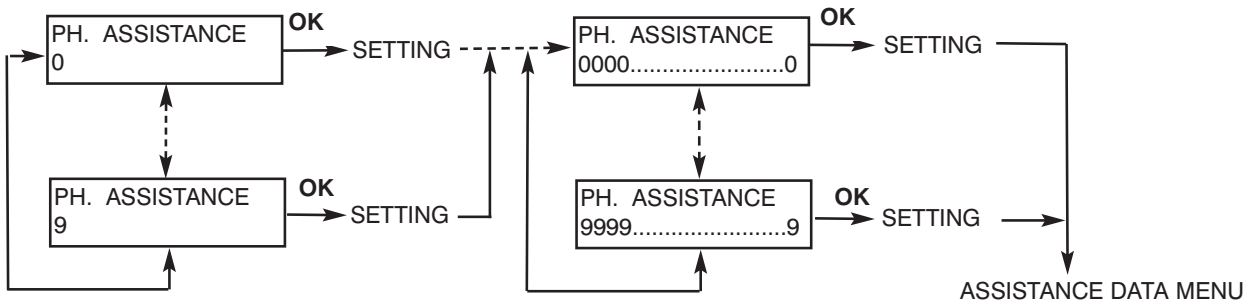


- **Service Data Menu.** Service Data Menu. Permits the user to input the name and telephone number of the service center: to input the name or the telephone number use the SCROLL DOWN and SCROLL UP keys to position on the desired letter/number; confirm the choice with the OK key. Repeat
- **Reset Maintenance Menu.** Zeroes all the diagnostics data in the memory of the control card (date of last maintenance, number of breakdowns, last error, number of battery interventions, history of the errors, etc.). This operation must be executed every time that an assistance intervention is performed on the automatism.
- **View Last Maintenance Menu.** Permits the user to view the date on which the last maintenance was performed.

NAME ASSISTANCE MENU

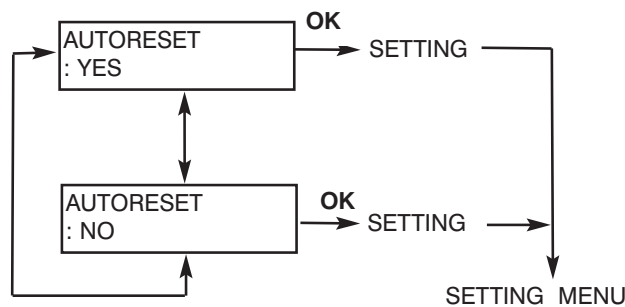


PHONE ASSISTANCE MENU

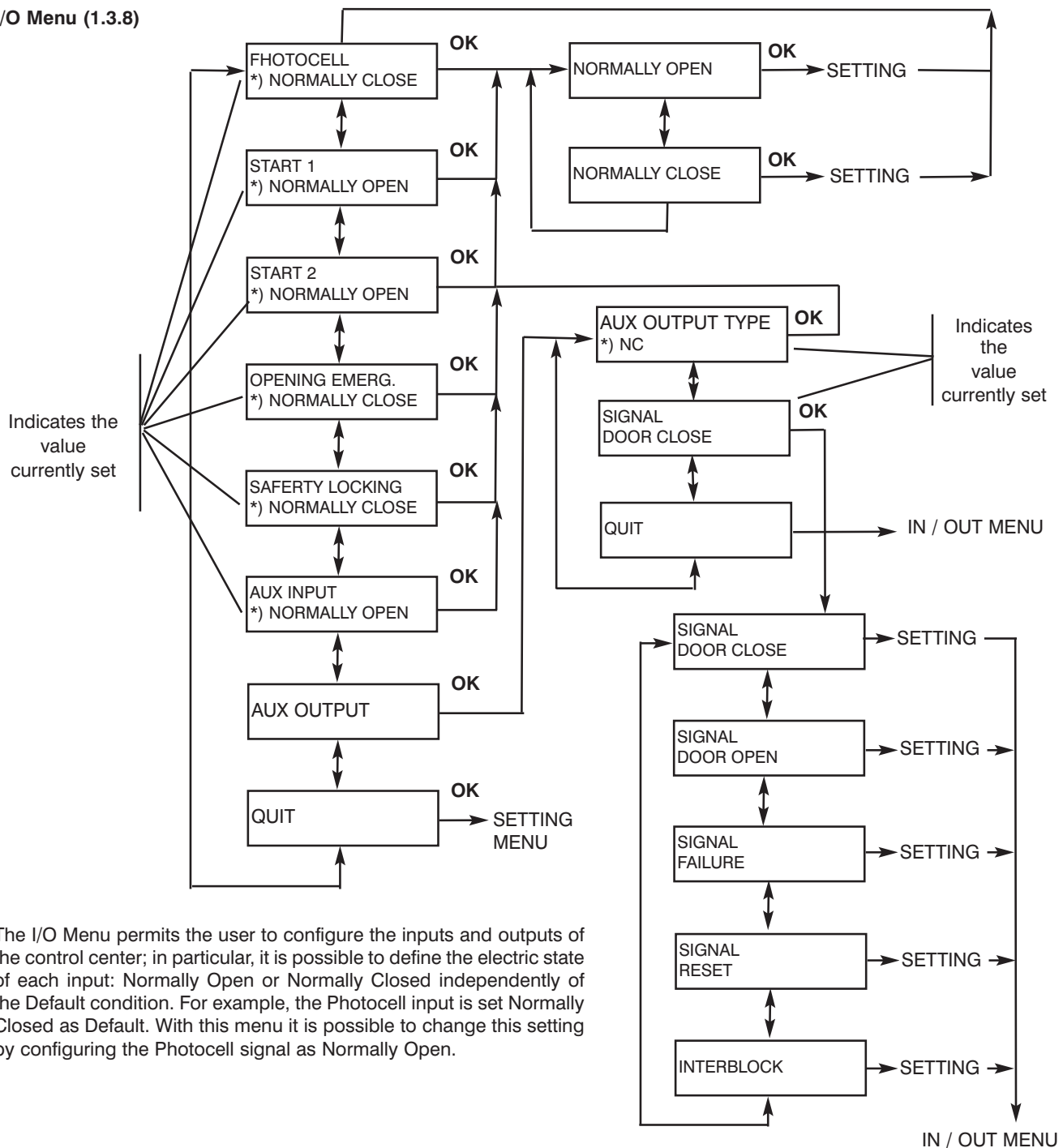


**AutoReset Menu (1.3.7)**

In the case of system breakdown, to restore normal operation it is necessary to perform a Reset manoeuvre. The reset may be performed with the multilogic selectors or in an automatic manner if the autoReset is active. By means of this menu it is possible to activate/deactivate the autoReset

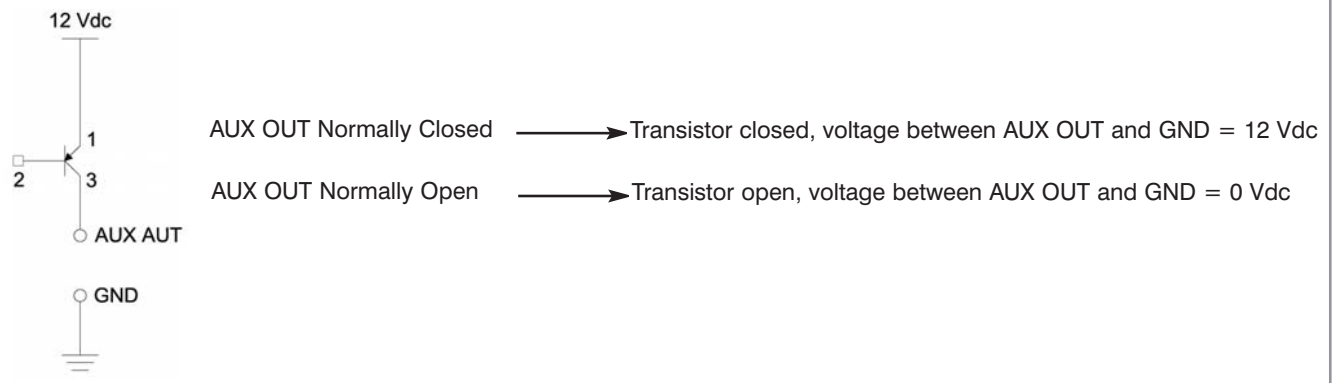


I/O Menu (1.3.8)

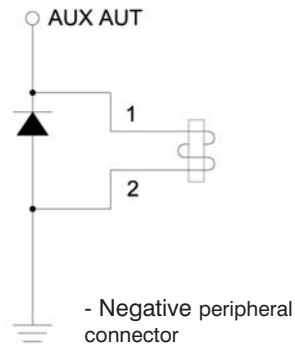


The I/O Menu permits the user to configure the inputs and outputs of the control center; in particular, it is possible to define the electric state of each input: Normally Open or Normally Closed independently of the Default condition. For example, the Photocell input is set Normally Closed as Default. With this menu it is possible to change this setting by configuring the Photocell signal as Normally Open.

- **AUX OUTPUT Signal.** Output auxiliary, transistor type PNP for the indication of particular states of the door (reset, opening, closure, etc.).
- By means of the **AUX OUT Type Menu** it is possible to configure the logic state, and thus the electronic state, of the AUX OUT output; see the following table for the logic state/electronic state relationship:



NOTE: the maximum output current is 100 mA. If this output is used to drive a relay, pay attention to the current absorbed and add a protection diode in parallel with the relay coil as shown in the figure:



The **Signal Menu** permits the user to select when the output signal is active; the possible options are:

- When the door is completely closed
- When the door is completely open
- When there is a breakdown of the door
- When the door is in Reset phase
- Interblock operation

#### Contrast Menu (1.3.9)

Permits the user to regulate the contrast of the Display.

#### Calendar Menu (1.4)

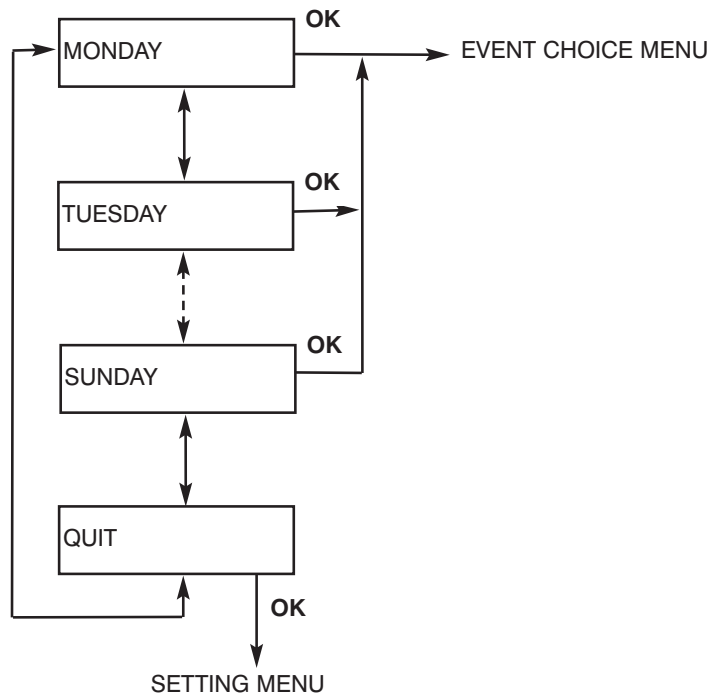
This menu permits the user to set changes of the operation logic (events) in automatic mode at a fixed hour and day of the week (up to a maximum of 4 events daily).

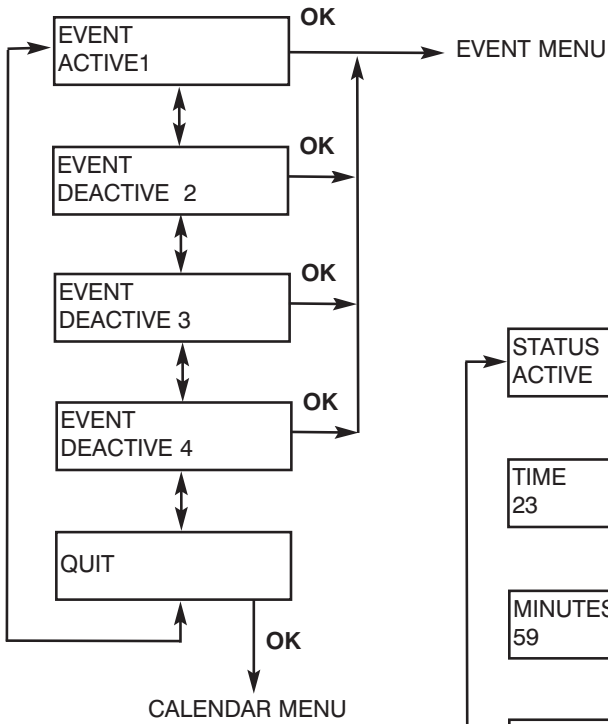
It is possible, for example, to set that at 8:30 in the morning a door that is in Stop Close logic shifts automatically into Two Radar logic (event 1). At 12:30 it shifts into Stop Close logic (event 2). At 14:00 it returns to Two Radar logic (event 3).

Finally, at 19:00 it shifts again into Stop Closed logic.

The example given above could be a classic application of a door mounted at the entrance of a shop or an office that is not manned during the lunch break.

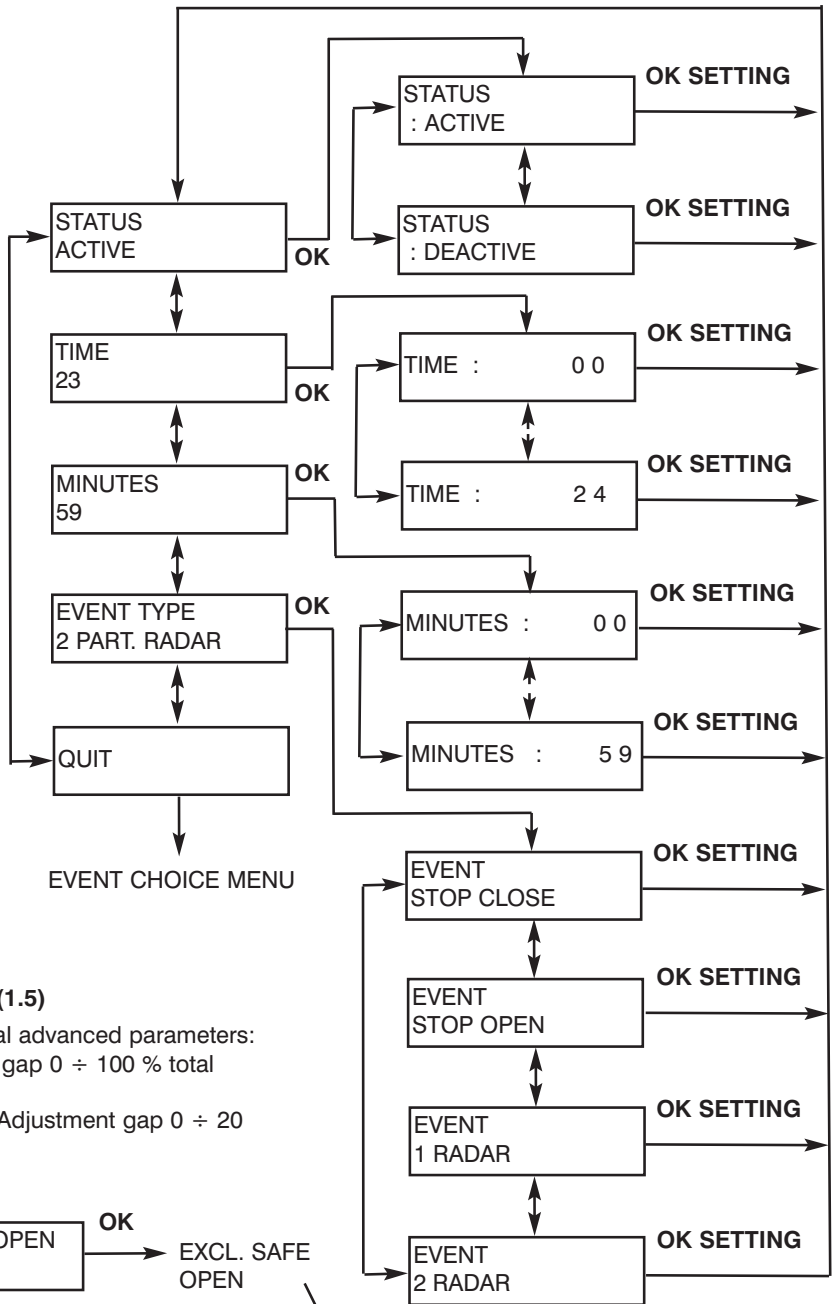
Select the day of the week for which the event is to be set





Select the event to be set; the second line indicates if the event has already been set (ACTIVATED) or not (DEACTIVATED).  
A maximum of four events may be set.

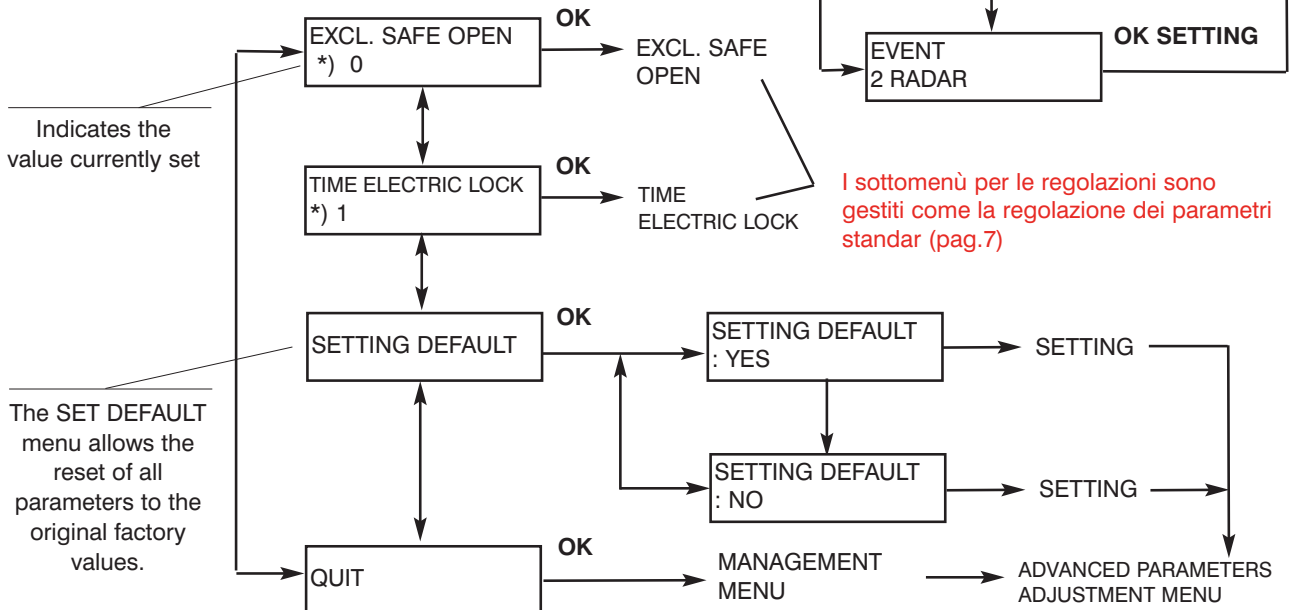
- For each event it is possible to set:
- STATE: indicates if the event is activated or not
  - HOUR: indicates the hour of the event beginning
  - MINUTES: indicates the minutes of the event beginning
  - EVENT TYPE: it is possible to choose the event type: Stop Close, Stop Open, One Radar, Two Radar.



**Advanced Parameter Adjustment Menu (1.5)**

Permits the user to adjust some operational advanced parameters:

- **Safety exclusion opening** : Adjustment gap 0 ÷ 100 % total limit switch. Default value 0 %
- **Activation timing of the electric lock** : Adjustment gap 0 ÷ 20 (10<sup>-1</sup> sec) . Default value 1 (10<sup>-1</sup> sec)



Indicates the value currently set

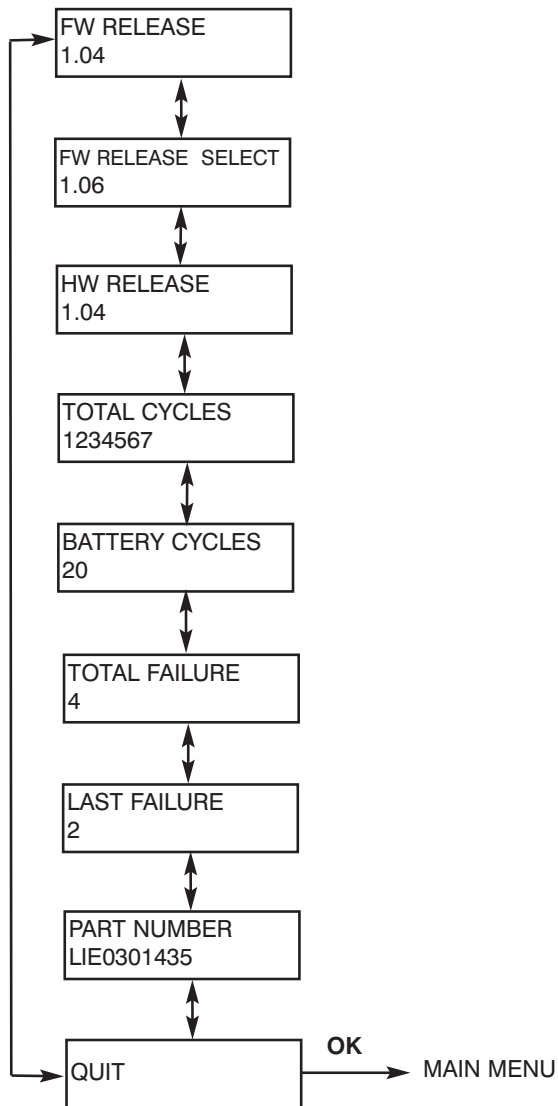
The SET DEFAULT menu allows the reset of all parameters to the original factory values.

I sottomenù per le regolazioni sono gestiti come la regolazione dei parametri standar (pag.7)

**Diagnostics Menu (2)**

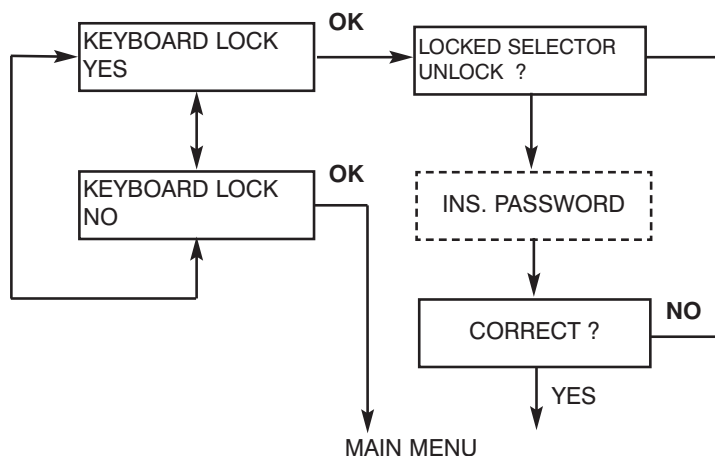
The Diagnostics menu is for reading only and permits the user to have some information concerning the state of the control centre:

- **LOGIC SW VERS:** indicates the software version currently loaded in the microprocessor of the control centre.
- **SELECT SW VERS:** indicates the software version currently loaded in the microprocessor of the advanced selector.
- **HW VERSION:** indicates the hardware version of the control card.
- **NUMBER MANOEUVRES:** indicates the total number of manoeuvres performed by the door from the moment in which the centre left APRIMATIC. This value cannot be zeroed. Manoeuvre is understood as a complete cycle of opening and closing: a possible inversion increases the number of manoeuvres.
- **BATTERY INTERV:** indicates the number of times in which the centre has been battery driven and thus the number of blackouts of the external power source. This value is zeroed each time that the maintenance is zeroed (See Service Menu).
- **TOTAL BREAKDOWNS:** indicates the total number of breakdowns. This value is zeroed each time that the maintenance is zeroed (See Service Menu). Through the connection with the PC it is possible to have the description of the last thirty breakdowns that have occurred.
- **LAST BREAKDOWN:** indicates the code of the last breakdown occurring on the system. This value is zeroed each time that the maintenance is zeroed (See Service Menu).
- **REGISTRATION:** indicates the registration number of the control centre.



**Keyboard Lock Menu (3)**

Permits the user to lock the keyboard; by selecting YES from the menu the keyboard becomes locked and on the display there appears the phrase "SELECTOR: UNLOCK KEYBOARD?" In this situation it is not possible to change the operation logic and move inside the selector menu. To unlock the keyboard press the OK key and insert the User Password.



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