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Carbon monoxide panel

PARK 2000 / PARK 5000

User guide

MN-DT-530_A
February 2017

Index

SECURITY INSTRUCTIONS

General security

- Don't lift heavy loads without any help

=> < 18 Kg

=> 32 - 55 Kg

=> 18 - 32 Kg

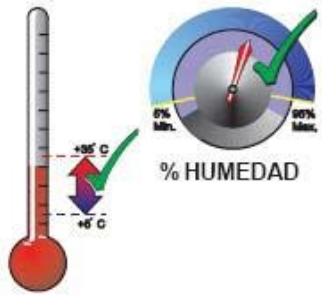
=> > 55 Kg

Electrical security

- Don't work alone in dangerous environment.
- Wires shall be in perfect conditions before connection. Please check.
- Disconnect power supply before use any metallic component or tool.

Batteries

- Batteries must be recycled properly.
- Contacted with an authorized Company for this purpose.
- Check instructions in new batteries any case.
- Don't manipulate batteries any case.
- In case of battery substitution uses the same type and characteristics used in original equipment.



1 Normative.

PARK-5000 Notifier system meets UNE-23-300/84 standard for detection and measurement of carbon monoxide gas.

1.1 Manual

This manual will help users with technical details of this panel in order to install and his start up.

Users shall read this manual carefully before start any work with this panel.

If you have any doubt check with the supplier before start up.

1.2 *Warnings and precautions*

The installation of this panel shall be carried on by an authorised installer.

Follow the instructions of this manual.

Don't connect or disconnect any equipment in the system without disconnect power supply.

Before start up with the configuration of this PARK 500 panel follow the recommendations of this manual.

NOTE

The manufacturer declines any responsibility if the manual instructions are not followed.

Manufacturer can modify this manual at his convenience without previous advertisement.

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2 Functioning

2.1 System

The control system is done by a microprocessor with specific software that supervises and controls the security and the reliability of the system.
System access is protected by a password code or Access level 2 key.
The system state is show by front indicators and sounder at any moment.

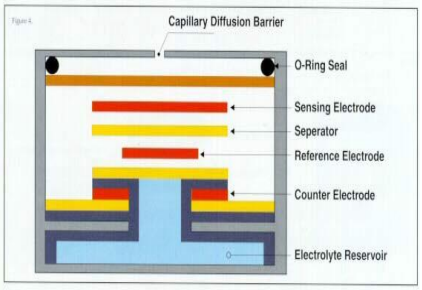
Power supply:

Panel incorporates a switched 45W (1,8 Amp) connected to the main 230 Vca. power supply.

Panel also has an auxiliary emergency supply by 24v batteries continuous monitored by the CPU microprocessor.

Power failure has 8 min retard to avoid alarms in case of momentary fails in power supply.

2.2 Funtioning principes



CO sensor is an electrochemical probe with two electrodes ' sensor' and ' counter' with a thin electrolytic in between.

This electrolyte is covered by a permeable gas membrane. The gas enters by diffusion in the sensor, crosses the membrane, and applies a voltage of polarization to them electrodes if there is a reaction of oxidation,

this generates a reduction of the electric current directly proportional to the concentration of gas. This type of sensor offers a good resolution and very high sensitivity. They are produced for selective detection of a specific gas. In each case, it is possible that the detector can detect trace amounts of other gases. The features of the so-called "cross reference" is determined by the manufacturer, own standard of approval documentation and attests to the corresponding certificate issued by the certified laboratory. The electrochemical sensor life is normally 4 years. The duration effective however depends on of the concentration of gas in the mixture that is causes a consumption of the electrode or the electrolyte.

3 Description

The system for detection and control of carbon monoxide is composed of:

- Control unit. Is called the block formed by a metal enclosure, power supply switching, control module, module back panel, board network connection and zones modules. There are two sizes of control unit:

  - PARK2000 of expandable 1 zone 2 areas
  - PARK5000, 3 zones expandable to 5 zones.

- Measurement of NCO-100 carbon monoxide detectors.

3.1 CONTROL MODULE is the micro processed unit where decisions are made by Park panel. Uses an 8-bit microcontroller that allows between other functions:

- Addressing and identifying individually each one of the detectors in each area.
- Check the concentration and temperature at each point.
- Check the sensitivity of each detector.
- Set up the plan of activation of the relays associated with ventilation, alarm and acoustic signal.

3.2 FUNCTION KEYS DESCRITION

1) Give access to different menus

User menu 

Superviser menu 

Technical menu 

Engineer menu 

2) Allows to stop the internal acoustic signal from supervisor menu..

Acts as a cursor in the direct access level in the configuration menu and modify the value in the edited parameter in the selected menu.

3) Allows the activation selection mode of smoke vans or other ventilating devices from supervisor menu.

4) Permit live the actual menu and go to previous menu.

5) Permit an instantaneous test for indicators, sounders and releasers.

Is the cursor for direct access level as well as in the configuration menu navigation. Modify the value in the selected field.

6) Allows muting the internal acoustic internal signal to a new possible alarm.

Allows sequential vans activation 1 and 2 for extraction from supervisor menu, 1111 in manual mode.

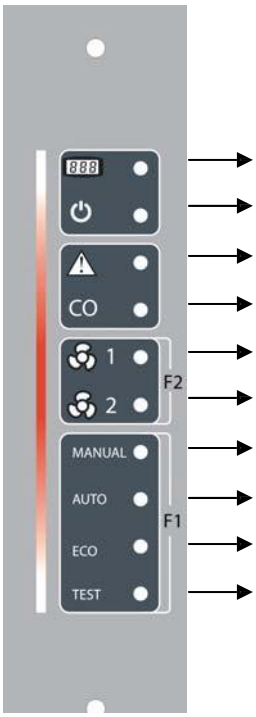
Also permit the editions of one field,

Also for change validations.

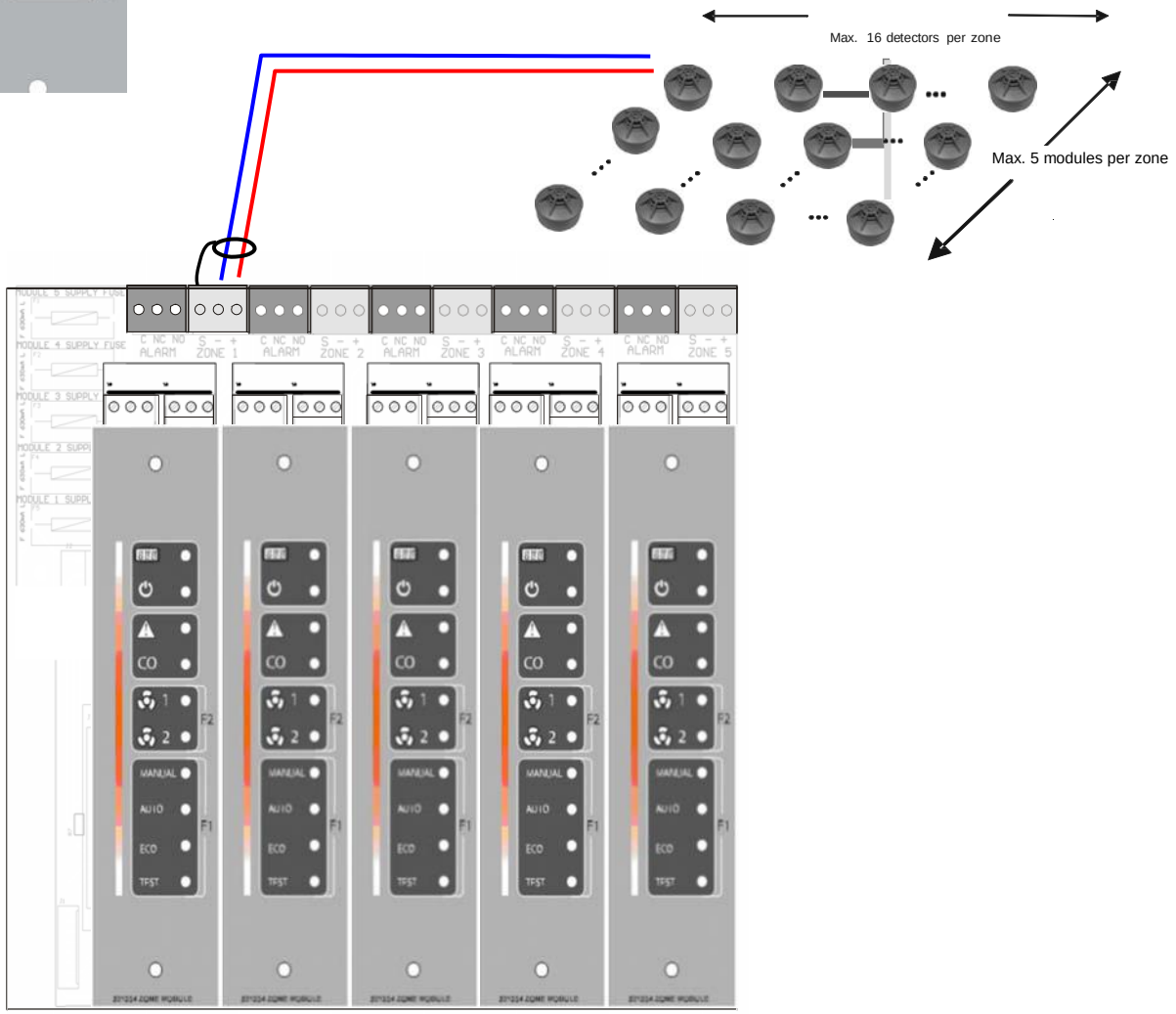
3.3 Detection zone module.

The zone module is a stand-alone module, powered via the back panel and from the switched power supply. From it detectors are fed and process the information digital sent by these.

Each module use specific led to show his state. The gas concentration is showed in the common control module.



1) Indicate the zone witch gas concentration control module is indicating
2) Indicate if zone is active
3) Indicate zone failure. Detector removed (intermittent) or open/cross line (continuous)
4 Indicate level of alarm concentration exceded (100 ppm). Zone alarm
5) Indicate manual/automatic activation ventilating group 1
6) Indicate manual/automatic activation ventilating group 2
7) Indicate manual ventilation activation
8) Indicate automatic ventilation activation
9) Indicate economical activation mode for ventilation (activation delay)
10) Test mode for the zone (no ventilation and silent alarm)



3.4 OPERATING CONDITIONS

Repose: The active zone indicator on the module is lit. If the sequential reading is activated, the maximum read value is displayed on the zone detectors.

Alarm: When the set alarm level is reached according to the configuration menu and the assigned delay times have elapsed, the alarm indicator lamp CO in the zone, the alarm relay and the acoustic signal (continuously) will be activated

Fault: Once a malfunction is detected, it will activate the acoustic signal intermittently and the fault indicator light on the zone module and the control module. The possible faults detected can be:

Query error.

Low voltage on the line.

Detector removal.

Excessive consumption

.

Extraction: This mode of operation can be achieved either automatically by setting the levels set by configuration or manually by using the user menu 1111. In this mode, you can configure the various working modes of the system:

- Automatic
- Economic
- Manual
- Test

4 Installation guide

4.1 How to use this section

This chapter includes a series of guidelines for installing the fire panel quickly and safely. Each step in the plant's installation and commissioning process includes a brief description and detailed drawings, flowcharts and charts to facilitate tracking of the instructions. Whenever necessary, the procedures are divided into one more diagrams, depending on the complexity of the task.

4.2 Before install

Check the condition of the packaging and the panel to ensure that it is not damaged, otherwise: DO NOT INSTALL, replace the panel and all contents of the package in its original packaging and contact your supplier for return and replace the equipment. Before installing the control panel or sensors you must ensure that the following criteria are met, otherwise the equipment may be damaged and problems may arise in the commissioning of the system or the operation of the system adversely affected

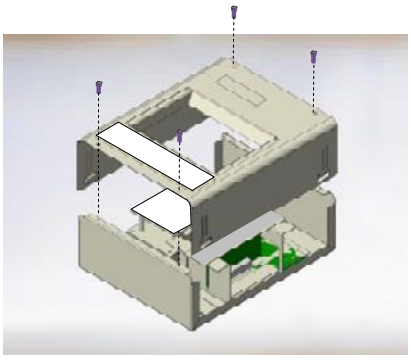
4.2.1 What to do

Before selecting a location for the PARK2000 control panel or PARK5000, you MUST ensure that:

A. The ambient operating temperature remains between: + 5 ° C and + 35 ° C
B. Relative humidity is between 5% and 95% (non-condensing) and there is no risk of moisture or water on the panel.
C. The panel is mounted on the wall so that you can clearly visualize the indicators and easily access the operation keys. The height from the ground should be selected so that the front is at eye level (approximately 1.5 m).
D. DO NOT place the panel in a place exposed to high humidity levels and DO NOT place the panel in places subject to vibration or shock.
F. DO NOT place the panel in places where difficult the access to internal equipment or wiring.

4.3 Protection against transient interference

This system contains equipment with protection against transient interferences. Although any system is 100% immune to electrical shock and interferences, in order for these equipment to function properly and reduce its susceptibility, this system must be properly grounded. Like all equipment with solid state electronics, this system may malfunction or may be damaged if subjected to transient induced electric shock or strong electromagnetic interference. The use of external aerial wiring is not recommended because it increases susceptibility to electric shock. Panel or wiring installation near elements with strong electromagnetic radiation is not recomended.



5 Box installation

5.1 Removing the cover

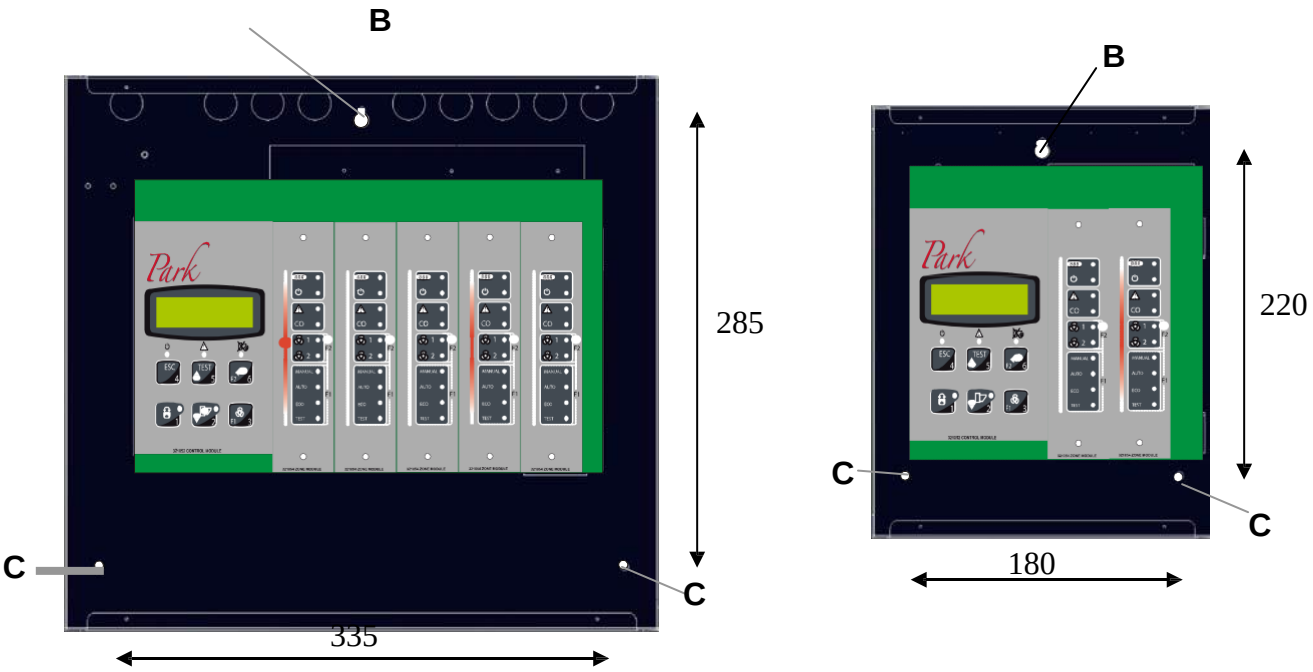
Remove the panel of the packaging and remove the 4 screws (A) from the cover. Leave the hub cover and screws in a safe and secure place to reinstall later.

5.2 Opening of wiring steps.

Before assembling the cab, open the required wiring through holes. There are enough pre-punched pipe steps in the top and rear of the cab. Refer to wiring section for step positions. Open the necessary steps with a dry blow on the desired hole. To open the cable gaps, lean on a suitable surface (for example a workbench) to avoid deforming the cab. If you need to mechanize the cab with new holes, first remove the main PCB and power supply removing the necessary screws and fastenings. Leave them in a safe and clean place for later installation. If you need to make other holes, be sure not to interfere with the components. Use a brush to completely remove the filings before

5.1 Cabin installation

The PARK5000 / PARK2000 control unit is mounted on the surface using the three fixing holes (B and C). If you need to know dimensions, refer to the specifications section of this manual. Use 5 mm diameter screws with lugs or fasteners to the surface where you want to install the cab. Preferably use suitable high expansion plugs 40 mm in length. Position the cab in the desired location and mark the locking hole (B). Make a hole of appropriate diameter to the locking stud. Place a 5 mm diameter screw and 40mm length without tightening thoroughly to allow the cab to be positioned correctly. Hang the screw cabinet through the hole (B) .Place the cabinet level and mark the holes (C) in this position. Remove the cab and leave it in a safe place to make the fixing holes. Do not drill with the cab mounted, or using the same as a template. Fix the cabinet to the wall with 5 mm diameter screws 40 mm long. Insert the cabling into the cab using the properly accessories.



6 Wiring

6.1 Wiring Instructions

All wiring must comply with the current IEE standard or applicable local wiring regulations. Observe the Low Voltage Regulation (RBT). CEM (Electromagnetic Compatibility) Requirement: To comply with the EMC requirements of the European Directives, it is necessary to use shielded or metal wiring. The conductor wire size must be at least 1mm2. The terminals accept flexible or rigid cables from 1 to 2.5 mm2. As a general rule, it is advisable to use 1.5 mm2 section cables. Cables must be inserted into the cab through the pre-punched 20 mm holes in the top or rear of the carton as required

Asegúrese de que la entrada de tierra está conectada y correctamente.

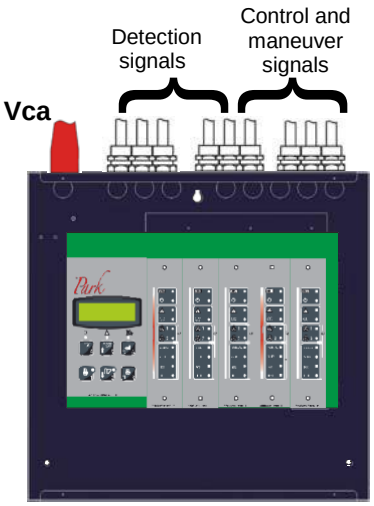
¡PRECAUCIÓN!. Riesgo de descarga eléctrica. Antes de manipular las conexiones, asegúrese de que la alimentación del panel está desconectada.

6.1.1 Power supply

The power supply to the control unit must be correctly identified on the electrical panel with a double pole connection device. The panel power supply must be connected through a separate differential with protection elements (fuse, magneto-thermal ...) of suitable values, in accordance with the specifications. Make sure that the power cables are inserted into the cab separated from the low voltage cables, preferably from the right side as this is the location of the terminal block connecting the power supply to the control panel. For proper protection the panel must be connected to a reliable and safe ground. All low voltage cables have a minimum of 300Vac. Following the instructions below and using the proper cable will prevent EMC (Electromagnetic compatibility)

6.1.2 How to wire the panel

This section describes how to insert the cables into the back case to facilitate wire connection



i. The main power wiring (230VAC) must be inserted into the control unit by the left hole, so that the path of the phase (L) and neutral (N) cable is as short as possible. Refer to the installation and commissioning section of this manual for more information on terminating the power wiring and grounding method.

ii. All terminations of zone and auxiliary cables must be inserted into the control unit in the appropriate positions and be perfectly channeled between the entry and the termination points.

iii. Signal and main power lines should not be mixed and the equipment should be prevented from crossing.

a. 230VAC main power wiring.
b. Relay circuits.
c. 24V Aux. circuits of entry.
d. Zone circuits, channels 1 and 2 (Park 2000) and channels 1 through 5 (Park 5000).

6.2 Wire quality

It is of vital importance that the cable used is of good quality and that it is installed correctly. In general, the following requirements must be met:

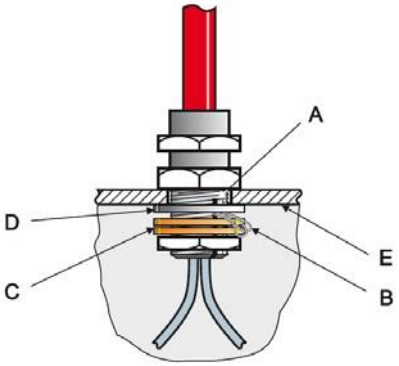
a. All cable sections must be circular so that the cable clamping is effective and avoid mechanical damage. Cable glands must have suitable cable glands.

b. The cable must be shielded to protect it from radio frequency interference and the screen must be grounded in the control cabinet.

c. The cables of the carbon monoxide detection system shall not be installed in areas subject to electromagnetic interference above the ranges described in the applicable standards nor by wiring conduits of other systems. The necessary separation must be maintained in other pipes to avoid mutual interference.

6.3 CEM

(Electromagnetic compatibility)



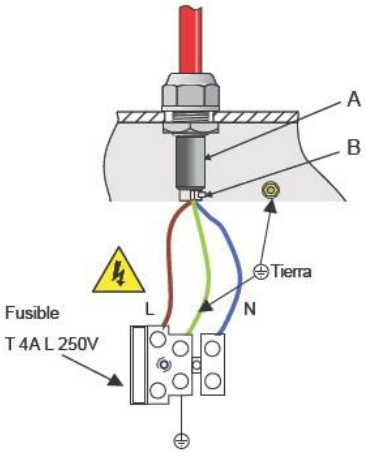
Shield termination

To ensure the required efficiency and EMC compliance, ensure proper grounding of the signal cable shield. Use a metal gland with grooves (A) that allows the wire or shield (B) to be secured between flat washers (C). Use a steel lock washer (D) between the brass washers and the inside surface of the back box (E). This will provide the best EMC termination. The selected part must fit into the dies (holes) of 20 mm.

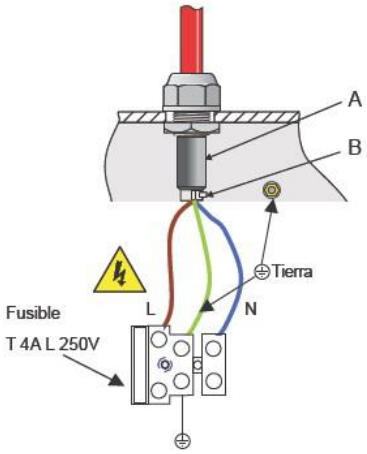
Screen terminations must be of sufficient length to ensure correct grounding

Alternatively, you can leave the shield terminations long enough to connect them to the ground terminal on the case. In such a case, use insulation covers for the bare screen sections to the ground terminal. Drive the ends attached to the back wall of the cabinet.

Note: When it is necessary to reduce the number of shield terminations connected to the control panel, an appropriate connection strip (not supplied) can be used alternatively.



Following the above instructions and using the proper shielded cable will prevent EMC (Electromagnetic Compatibility) problems. In the presence of strong interference, it is advisable to place ferrites (A) (not supplied) on all conductors and as close as possible to the cable entry point. If necessary, use a cable clamp (B) (not supplied) to hold the ferrite. In environments with particularly difficult electromagnetic interference or in which a recommended cable is not used, it is advisable to install ferrites in all the cable entries of the control panel (power input, siren and auxiliary output cables).

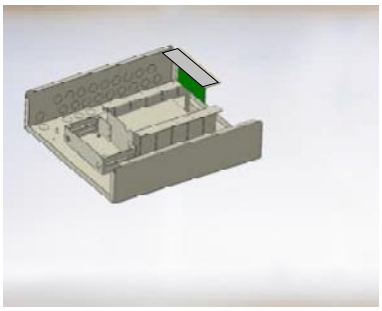


7 Installation and start
Before connecting the main power to the control panel, check that:

1 The main power ground wire is connected to the ground connection of the main power strip of the panel and that the ground bridge (EARTH FAULT) is attached. This is a critical connection for electrical safety and adequate filtering of potential transients

2 Turn on the power (main and external emergency power supply if available).

7.1 Panel power supply
Disconnect the corresponding service switch from the main power box before handling the electrical connections. Before connecting the main power to the control panel, be sure to perform the following procedures and checks: Make sure that the power cables are inserted into the cabinet separate from the low voltage cables. Check that the service box power differential has been cut off



For added safety: REMOVE THE MAIN POWER SUPPLY FUSE AND SAVE IT SAFELY UNTIL YOU FINISH ALL WIRING INSTALLATION
.

1 Follow the instructions in the Preliminary Checks section of this manual.

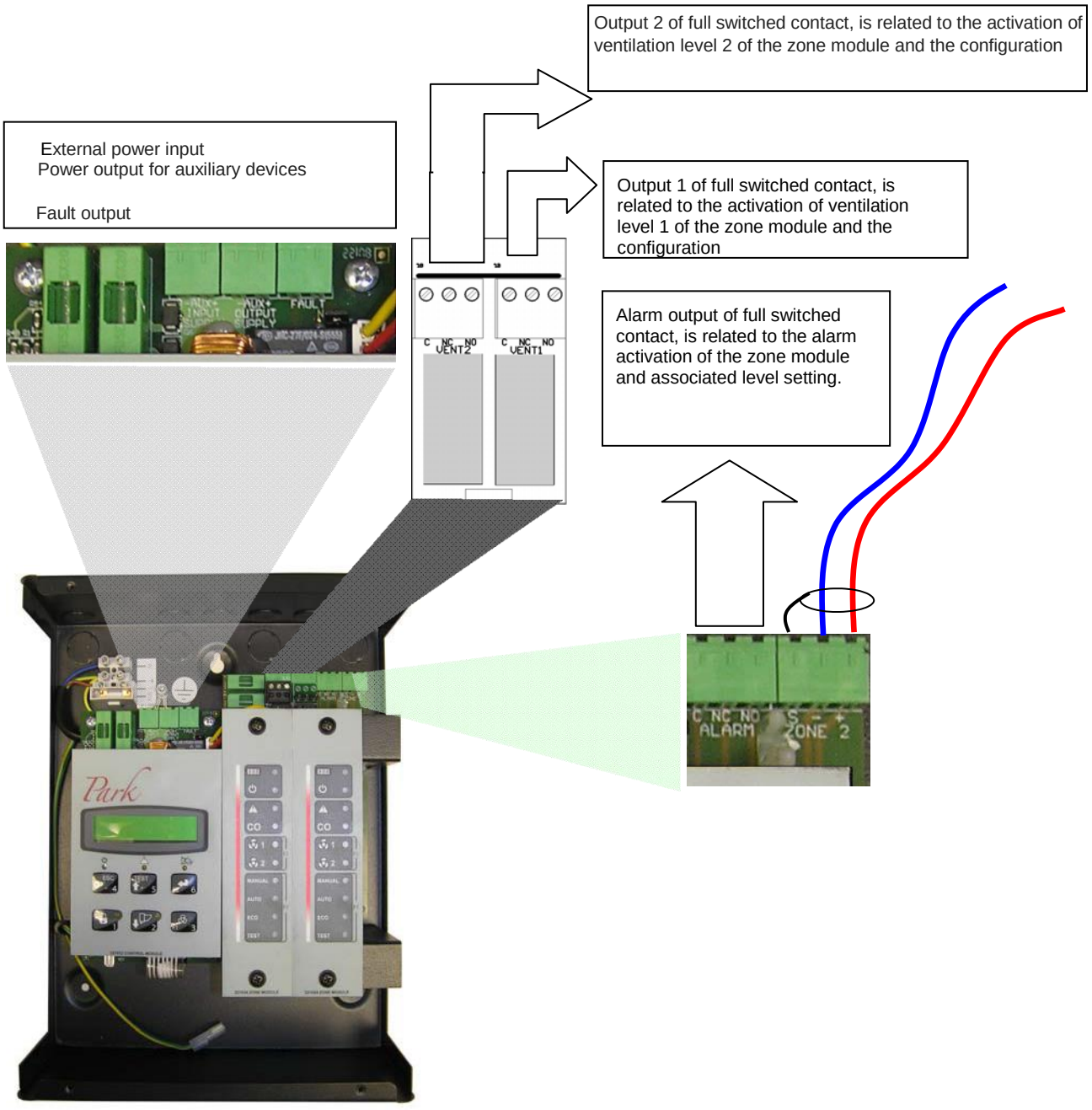
2 Prepare the wiring of the power supply unit as follows:
i Remove the hose sleeve, to leave about 100mm of each conductor. Remove about 8mm from the sheath of each conductor.
ii Turn the power cables together to separate them and separate the ground wire before connecting them.
iii Connect the Phase (L) and Neutral (N) wires to the left and right terminals, respectively, of the panel power strip. Connect the ground wire () to the center terminal of the power strip. See drawing.

Note: The power terminals accept cables between 1 and 2.5 mm2 section. In the presence of electromagnetic interference, it is advisable to place a ferrite (A) (not supplied) on the power cables. Secure with a nylon flange (B) (not supplied).

7.2. - Switching outputs connection

Each of the zone modules described in section 2.2, when inserted, enables the corresponding main mainboard outputs, these are: the zone alarm output consisting of a complete circuit free of voltage and, on the other hand , The input of monoxide detectors

In addition, each module includes a module of relay outputs that is supplied with each zone module and that must be connected when incorporating the module. This relay module provides the module with independent control outputs of the ventilation system which can also be controlled independently by the control panel according to the configuration set up under the supervisor or technician menus (see section 8.3).



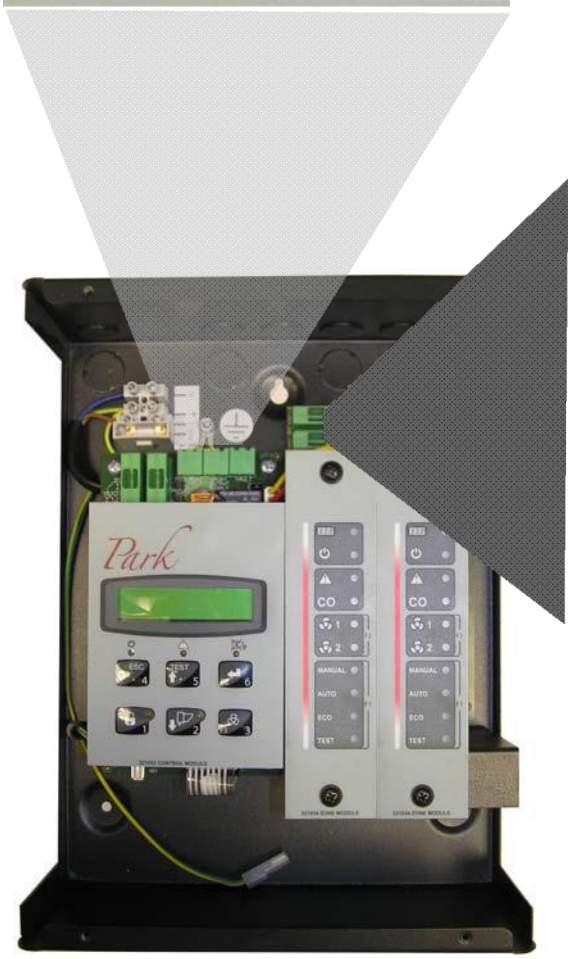
Auxiliary input power fuse 5 x 20 2A

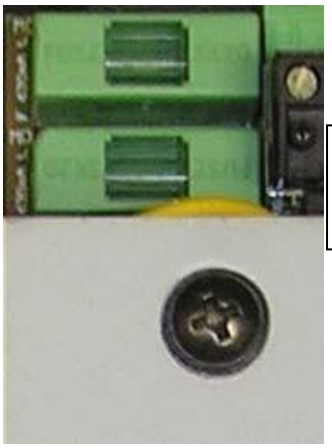
Auxiliary output power fuse 5 x 20 310 mA

External power input
Monitored by the panel when configured in the Technical menu

Power output. It is monitored by the control panel when it is configured from the technical menu

Fault output. Free contact voltage. You can select the mode, normally open or closed.



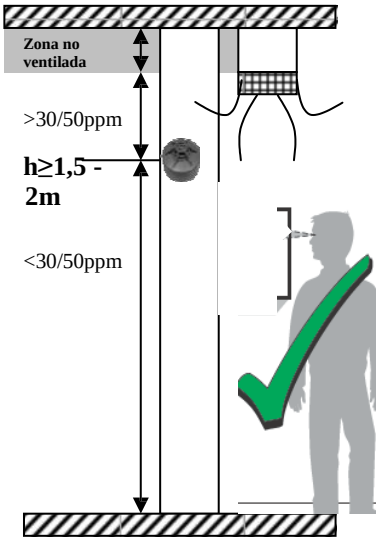


Fuse protection of channel 2 on Park 2000

E x 20 630 mA

Fuse protection of channel 1 on Park 2000
5 x 20 630 mA

7.3. - Location of NCO-100 detectors.



NCO-100 detectors should be located at a height above the floor so that they are above the room's breathable volume (h = 1.5-2 m approx.) And below the exhaust vents

The ambient CO level should be kept below 30 / 50ppm in the breathable volumes of the protected premises.

The automatic operation of the system guarantees concentrations below the breathable limits in the volumes with height below the CO

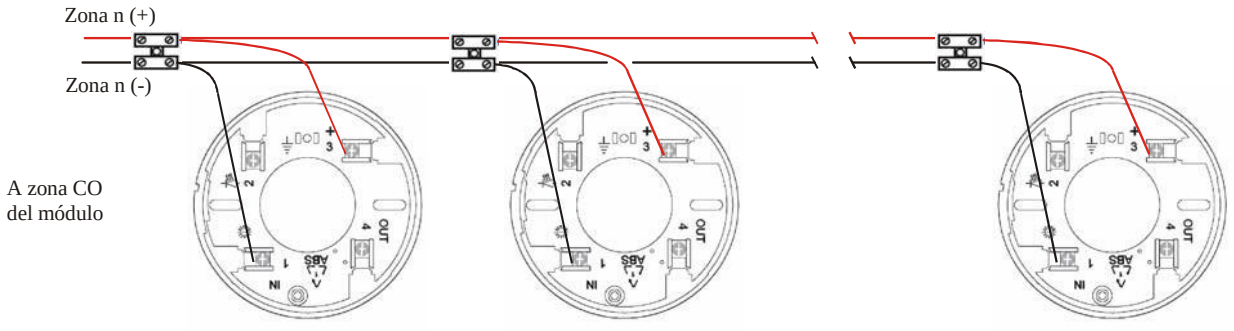
It is necessary to take into account the possibility of accumulation of CO (CO bags) above the height of the extraction grids, which will not be possible to extract properly. Avoid placing the detector in these areas of permanent concentration, which will cause uninterrupted operation of the extraction.

7.4. - Connecting the NCO-100 detectors

The NCO-100 detectors are connected to the two wires (positive and negative) of the corresponding CO detection zone.
Due to the timely identification of each sensor in the zone, it is possible to detect open line fault, line short circuit or loss of a detector.

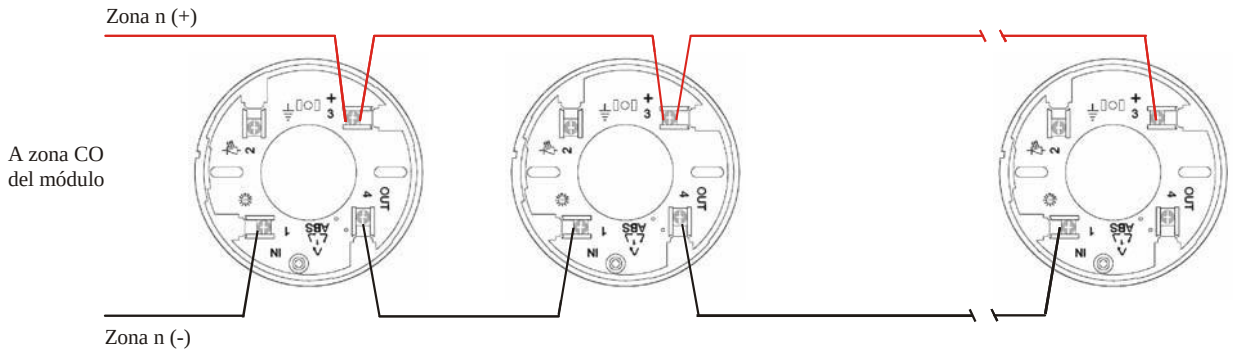
7.4.1. - PARALLEL connection (optimum connection)

The connection to the detectors is made from the branch line derivation on the line. If a detector is missing, the remaining detectors are still connected to the line; the control panel will indicate the corresponding fault in the zone, due to loss of equipment.



7.4.2. - Connection SERIE.

Each detector is connected to the output of the previous one. If one of them is extracted, the following are automatically disconnected. The control panel will indicate the corresponding fault in the zone and the open line. The Park5000 / PARK2000 control unit uses a digital communication system with individual identification, so this type of connection is **not** recommended.



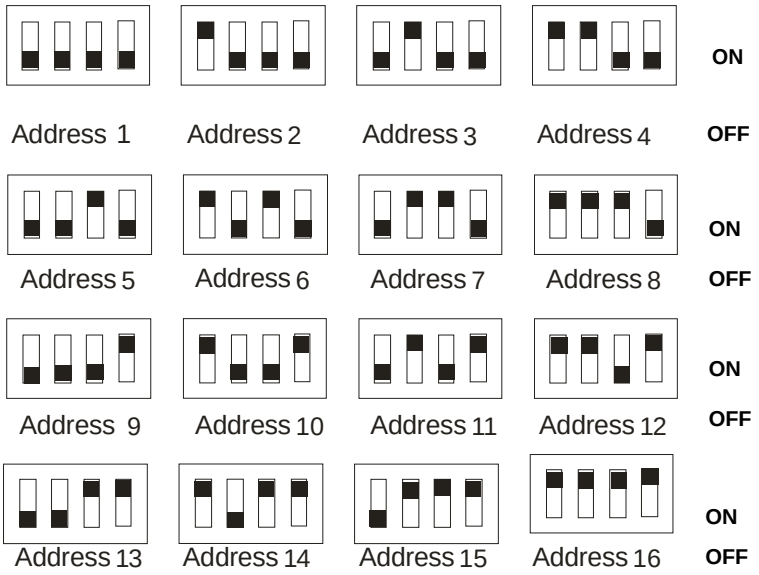
7.4.3. - Addressable detectors.

The system you are about to install requires you to indicate to each detector the direction it occupies within the loop. It is imperative that in the loop the used addresses have continuity and start with address # 1. Each loop supports up to 16 addresses. Make sure no intermediate addresses have been omitted or any of them have been

Do not forget to address the detectors. If the addresses are not correlative, jump a number The device search will be truncated

Check that the address of the Detectors is correct.

Start at address 1 and do not skip any intermediate directions



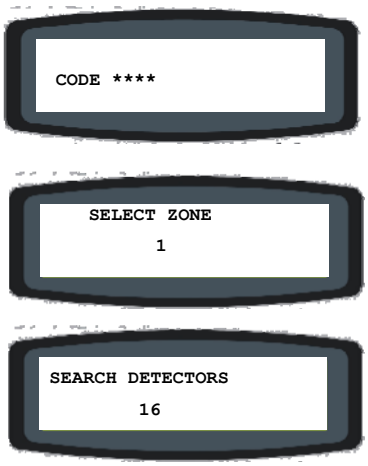
8 Operation

Check hearth connection

For proper operation of the system, it is necessary to recognize the detectors installed from the supervisor menu, 2222.

Select "Search for detectors" 0 by default

Indicates the detected detectors, 0 in the first system configuration pulsation



With  starts a new search and blinks 
If "ESC" is pressed during the search, the search will end . At the end of the search, press "ESC" if it is in accordance with the registered value, or press  again if you want repeat the search.

NOTE: During the first search when the panel is first set up, the CO alarm may be activated momentarily. This is due to the process of managing the internal memory in the first data recording.

Once configured, the system operates automatically, indicating the concentration and performing the extraction maneuvers in each zone, independently

- The display shows the maximum concentration detected in the detectors of each zone.

- The reading is shown for each zone sequentially

- If the zone concentration reading exceeds the Ventilation Level 1 value for the time set by the configuration, the Ventilation output 1 of said zone is activates until the value decreases below programed level during 2 minutes. The zone ventilation LED flashes during this state.

- If the zone concentration reading exceeds the Ventilation Level 2 value for the time set by the configuration, the Ventilation output 2 of said zone is activated until the value falls below that level during 2 minutes. The ventilation LED lights steadily during this state.

- If the zone concentration reading exceeds the Alarm Level value, the Alarm output of the zone will be activated and until the value decreases below that level. The Zone Alarm LED (Red) lights steadily during this state.

- If the alarm level is maintained during the preset time by setting, the zone module buzzer activates until the value decreases below that level or the acoustic key of the corresponding zone module is pressed.

9 Configuration

This section describes the menu options, access, actions, etc. of the PARK2000 and PARK5000 system.

9.1. - Start-up

Make sure that you have addressed the detectors correctly before commissioning. The addresses must be correlative starting with 1. If the location is not correct but the system locates the correlative addresses, the system will resolve the address and identify all the equipment when it is requested.

NCO-100 detectors are not automatically recognized when the system is first started; go to "Search for detectors" in the supervisor menu, 2222. "SEARCHING" will be displayed during the detector search process. Devices connected in the zone are detected. It is recommended to wait 30 minutes the first time before starting to operate for better reading reliability. The stability and optimum precision is reached after 48 hours of uninterrupted operation

9.2 USER and Configuration MENUS

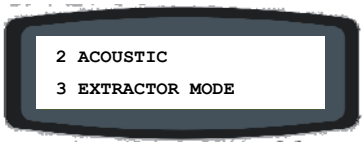
Pressing the 1 key "key" will illuminate the keyboard led and will proceed to enter one of the following codes

.

9.2.1 Code"1111" (USER)

With  ↑↓ the zone on which you want to operate is selected. The display and the operating led of each zone show the selected zone.

You also can access to this level with the key in front of the panel.



With key "2"  All acoustic signals are inhibited and the corresponding LED lights up.

With pressing key "3"  can change operating mode.

If manual mode is activated you can select by key "ENTER"

 for activation of the ventilation relays

By pressing the TEST key  the LEDS TEST is activated.

9.2.1.1- Operating modes

The control panel has 4 different operating modes as selected.

9.2.1.2- Automatic mode

When the control panel is working in this mode, the corresponding panel LED lights up. In this case, the control panel receives information from the connected devices in the zone and displays the maximum value of all of them. If this value exceeds the level programmed in the control panel, it will act as follows:

- If the concentration assigned to fan 1 is exceeded for more than 2 minutes, the ventilation LED will flash and the relay VEL1 will be activated. To exit this situation, the level must be below the concentration assigned to fan 1 for 2 minutes.
- If the concentration assigned to fan 2 is exceeded for more than 2 minutes, the ventilation LED will be lit in fixed mode and the relay VEL2 will be activated. To exit this situation, the level must be below the concentration assigned for fan 2 for 2 minutes.
- If the concentration assigned to the alarm level is reached, the extraction will immediately take effect, the ALARM led will be illuminated and the ALARM relay will be activated, the module will sound after 10 minutes of maintaining the condition and until the concentration level Below the programmed alarm level or the USER silent alarm pressing key 6 

.

NOTE: The activation concentration of the outputs depends on the sensitivity level set, see the supervisor menu

9.2.1.3. - Economic Mode (ECO)

When the control panel is working in this mode, the ECO mode LED in the zone lights up. In this case, the control panel receives information from the connected devices in the zone and displays the maximum value of all of them. If this value exceeds the level programmed in the control panel, it will act as follows:

- If the concentration assigned to fan 1 is exceeded for more than 4 minutes, the ventilation LED will flash and the relay VEL1 will be activated. To exit this situation, the level must be below the assigned concentration for fan 1 for 2 minutes.

- If the concentration assigned to fan 2 is exceeded for more than 4 minutes, the ventilation LED will illuminate in fixed mode and the relay VEL2 will be activated. To exit this situation, the level must be below the concentration assigned for fan 2 for 2 minutes.

- If the concentration assigned to the alarm level is reached, the extraction will immediately take effect, the ALARM led will illuminate and the ALARM relay will be activated. The module will sound within 10 minutes of maintaining the condition and until the concentration level is below the programmed alarm level or the user silent the alarm pressing key 6  .

NOTE: The activation concentration of the outputs depends on the sensitivity level configured, see the supervisor menu.

9.2.1.4. – Manual mode

Once the user has selected this working mode by pressing key 3  in this level pressing key 6  is possible the sequential activation of extraction fans 1 y 2.

9.2.1.5. - Test mode.

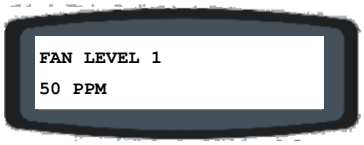
The test mode works the same as the automatic except that none of the extraction or alarm outputs will be activated if the programmed level is exceeded, considering that the installer is injecting standard gas to the detectors to certify its proper operation.
The module will indicate the concentration of the red pilot of the detector itself in tests when it exceeds the configured level.
This mode of operation has a limited time of 5 hours from the last press of any key on the module.

9.2.3 Code "2222" (SUPERVISOR) 

By  ↑↓ the zone on which you want to operate is selected.

The display and the operating led of each zone show the selected zone

In this menu by keys  ↑↓ is possible:



1. - Select "Fan level 1", 50ppm x defect.

Allows you to change the concentration level of CO to which the output for the extraction fan 1 will be activated. This adjustment is made by zone. The response mode of this output depends on the hysteresis and the activation times set in the technician menu, 3333.

Pressing  blinks  and it is possible to edit the field value. Through  ↑↓ value is modified. Press  to validate.

2. - Select "Fan level 2", 100ppm x defect.

It allows modifying the concentration level of CO to which the output for the extraction fan 2 will be activated. This adjustment is made by zone. The response mode of this output depends on the hysteresis and the activation times set in the technician menu, 3333.

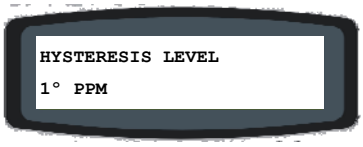
Pressing F2 6 blinks 1 and is possible edit the field value.

Using TEST 5 2 ↑↓ is possible modify value. Press F2 6 for field validation.

3. - Select "Alarm Level", 150ppm by default.

It allows modifying the concentration level of CO to which the alarm output will activate and therefore alarm indicator of the zone module and the corresponding acoustic signal. This setting is per zone. The response mode of this output depends on the hysteresis and the activation times set in the technician menu, 3333

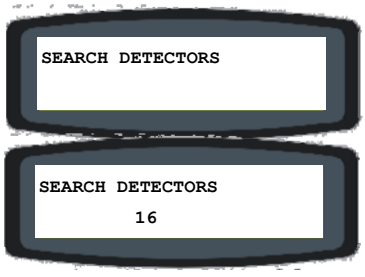
Pressing F2 6 b l i n k s 1 and is possible edit the field value. With TEST 5 2 ↑↓ modify the value. Press F2 6 for field validation.



4. - Select "Hysteresis Level" 10ppm by default.

It allows delaying the deactivation of the relay to avoid rebounding in the contacts due to an indefinite level.

Pressing F2 6 blinks 1 and is possible edit the field value. With TEST 5 2 ↑↓ modify the value. Press F2 6 for field validation.



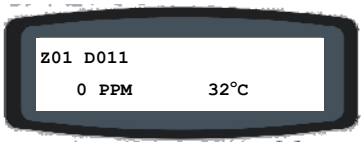
5.- Select "Search for detectors" 0 by default.

Indicates the detected detectors, 0 in the first system configuration

Pressing F2 6 sarts a new search and blinks

If "ESC" is pressed during the search, the search will end. At the end of the search, press "ESC" if you are satisfied with the registered value, or press again F2 6 if you want repeat the search

NOTE: During the first search when the panel is first set up, the CO alarm may be activated momentarily. This is due to the process of managing the internal memory in the first data recording.

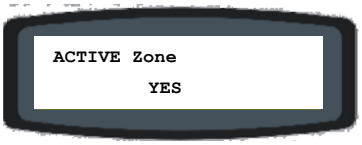


6. - Select "Concentration" to read the concentration of ppm and Temperature in ºC of each sensor. The sensor number appears on the display and the corresponding sensor flashes green.

It allows reading the concentration and temperature of each of the detectors of the zone. Facilitates the identification of installation faults or address assignments.

9.2.4 Code "3333" (TECHNICAL)

By TEST 5 and 2 ↑↓ the zone on which you want to operate is selected. The display and the operating led of each zone show the selected zone. In this menu and by means of:



1. - Select "Active Zone". If "NO" is selected, the selected module is switched off.

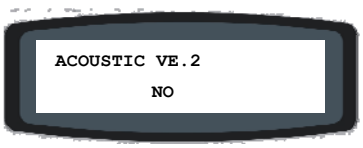
Alllosws the zone disconnection and leave it out of service. Similarly, you can activate the zone. The zone indicator goes off or goes on. Configuration by zone.

Pressing F2 6 blinks 1 and field edition is possible. Through TEST 5 and 2 ↑↓modify the value. Press F2 6 for field validation.

2. - Select "Acoustic alarm when activating fan 1".

When the field is activated in mode when the preset concentration level is exceeded, the acoustic signal of the control panel will be activated. You can mute up to one new alarm pressing F2 6 or from user menu, 2222, deactivating the acoustic signal any way.

Pressing F2 6 blinks 1 and field edition is possible. Through TEST 5 and 2 ↑↓ modify the value. Press F2 6 for field validation.



3. - Select "Acoustic alarm when activating fan 2".

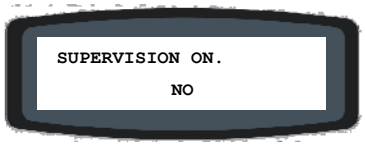
When the field is activated in mode When the preset concentration level is exceeded, the acoustic signal of the control panel will be activated. You can mute up to one new alarm pressing F2 6 or from user menu 2222, deactivating acoustic signal anyway.

Pressing  blinks  and field edition is possible. Through  ↑↓ modify value. Press  for field validation.

4.- Select "Acoustic alarm in CO alarm"

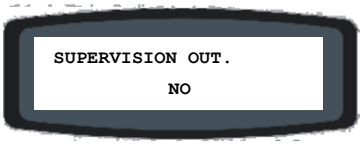
When the field is activated in mode When the preset concentration level is exceeded, the acoustic signal of the control panel will be activated. You can mute up to one new alarm pressing  or from user menú '222' desactivting acoustic signal anyway.

Pressing  blinks  and is possible field edition. Through  ↑↓ modify the value. Press  for field validation.



5. - Select "Auxiliary power input supervision".

PARK monoxide units have an external 24Vdc power input. This input can be configured to detect a short-circuit or loss of the input

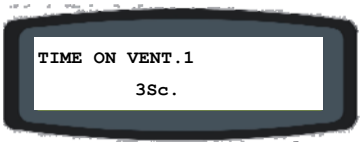


Pressing  blinks  and is possible field edition. Through  ↑↓ modify the value. Press  for field validation.

6. - Select "Auxiliary power output monitoring".

PARK monoxide units have an external 24Vdc output. This input can be configured to detect a short-circuit or loss of the input voltage.

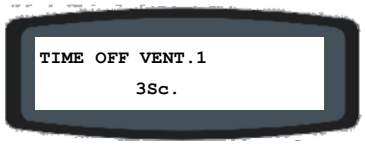
Pressing  blinks  and is possible field edition. Through  ↑↓ modify the value. Press  for field validation.



7. - Select "Fan time 1 for ON"

It allows modifying the delay times for the activation of the extraction fan 1.

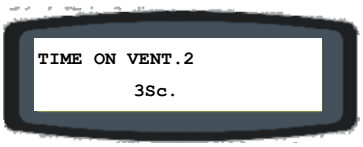
Pressing  blinks  and is possible field edition. Through  ↑↓ modify the value. Press  for field validation.



8. - Select "Fan time 1 for OFF"

Allows you to modify the delay times for deactivating the extraction fan 1

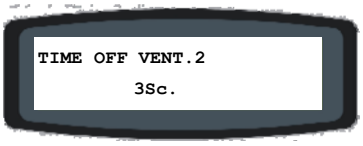
Pressing  blinks  and is possible field edition. Through  ↑↓ modify the value. Press  for field validation.



9. - Select "Fan time 2 for ON"

Allows you to modify the delay times for activating the extraction fan 2.

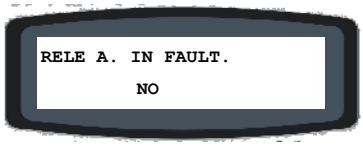
Pressing  blinks  and is possible field edition. Through  ↑↓ modify the value. Press  for field validation.



10. - Select "Fan time 2 for OFF"

Allows you to modify the delay times for deactivating the extraction fan 2.

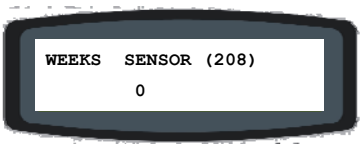
Pressing  blinks  and is possible field edition. Through  ↑↓ modify the value. Press  for field validation.



11. - Select "Activation alarm relay in fault".

Allows the zone alarm relay to be activated in case of zone failure

Pressing  blinks  and is possible field edition. Through  ↑↓ modify the value. Press  for field validation.



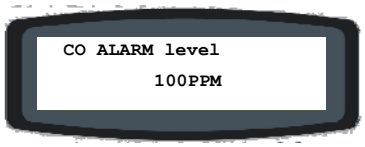
12. - Select "Sensor weeks query".

It allows verifying the time that the sensor has been functioning since its last calibration in factory.

13. - Select "Automatic zone rotation", default "NO".

It allows eliminating the sequencing of the reading between channels. By default the system performs the sequencing of the maximum reading of all the activated zones and presents it on the display of the

Pressing F2 6 blinks 1 and is possible field edition. Through TEST 5 2 ↑↓ modify the value. Press F2 6 for field validation.



14. - Select "CO level in test".

It allows setting the activation level of the detector indicator in TEST mode. Once the activation is verified, the control panel will retain the maximum value reached for each of the detectors checked.

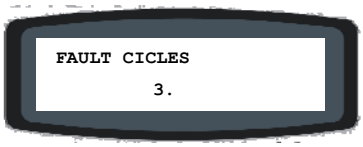
This feature allows all detectors to be checked by a single operator

9.2.5.- Code "4444" (SUPER TECHNICAL)

ESC 4 ESC 4 ESC 4 ESC 4

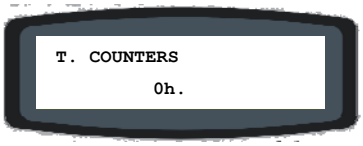
By TEST 5 2 ↑↓ The zone on which you want to operate is selected. The display and the operating led of each zone show the selected zone. In this menu and through you can:

1. - Failure cycles. Select the number of times a communication error is allowed "before indicating it. By default 1.



In installations with high levels of disturbance, it is possible to minimize their effects, increasing the number of times that the communication protocol must identify a failure in the communication frames.

2. - Check the time in counter hours.



It allows to verify the number of hours elapsed since the last counters erasure. This function allows to objectively identify the time within which a problem has occurred .

3. - Clear the counters.

Allows the alarm and zero fault counters to be set

4. - Select Language. By default "Spanish"

Change the language of the screen messages.

5. - Check the number of times you have detected a fault.
Counter since the last memory erase.

6. - Check the number of times it has entered alarm.

Alarm counter since the last memory erase.

7. - Check the number of times the fan has been activated 1.

Activation counter for extraction 1 from the last memory erase**.**

8. - Check the number of times the fan has been activated 2.

Activation counter of extraction 2 since the last memory erase. During normal operation and before the acoustic alarm is triggered, pressing the "Acoustic mute" button will mute, but if it happens again another one will be activated again.

By 

↑↓ can select zone to control

10.- Features and specifications.

Table 1:

Tensión de red	***230V AC +-10%***
Control module power supply	*24Vdc.*
Maximum power per module zone P100	*8,4W @ 24V.*
Carbon Monoxide Measurement Range	*0 ppm to 300 ppm.*
Reading Modes	A way. Maximum reading.
Environmental conditions	-10 ° C to 50 ° C.
Connecting zone	Two twisted wires and screened minimum 1.5 mm2.
Maximum linear distance per zone	1000 mts.
Maximum number of detectors per zone	16 detectors.
Ventilation outputs.	Two exits. Dry contact extraction 250V / 10A
Alarm output.	An exit. Dry contact
Output fault.	120Vac / 1A.
Extraction programming levels.	30Vdc / 1 A.
Alarm programming level	An exit. Dry contact
Modes of operation	120Vac / 1A.
Keyboard	30Vdc / 1 A.
Visors and indicators	Configurable

11. - Cautions

• Do not install the control panel or detectors in places where they may receive splashes of water or other liquids.

• Do not leave the detectors installed if:

- O There is no supply voltage.
- O All the works of the work have not been completed.
- O Maintenance work will be carried out such as painting, demolition, degreasing, foundations, disinfection, etc. These jobs can release particles that alter or obstruct the sensor.

• The recommended installation height of the detectors is between the 1,5m and 2m above ground level.

• Do not paint the base or cover of the detectors.

• Do not test the detectors by applying some burning material. To test the detectors must use bottles with compressed CO at a certain concentration.

• If the detectors are temporarily removed, store them in a clean, dry, dust-free place and protect them by means of a hermetically sealed plastic bag.

• Use separate conduits from the rest of the facility to wire the detectors.

• Avoid installing detectors near sources that generate electromagnetic disturbances. If it is necessary to install them near emitters of electromagnetic disturbances, it is recommended to use shielded cable.

• Do not use the switchboard box to install other devices inside it or drill holes in it.

• Do not plug the cables into the connectors without disconnecting power from the area.

• Use 1.5mm2 unipolar cable for connection to the control unit and protect it by means of a 5 A magnetothermal, specific for this equipment.

• Remember to replace the sensor within a maximum of 5 years.

• Do not supply additional power to other devices through the power

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LABORATORIO OFICIAL J.M. MADARIAGA

APARATOS DE DETECCIÓN Y MEDIDA DE GASES

m.- **CERTIIFICADO DE CONFO'RMIDAD**

2.- Real Decreto 2367/1915 de 22 de Noviembre de 1985

J.- LOM08MOGA36Sj

4.· T¡po dt: Equipo y d1mcmlm ción comercial:

Equipo de detccdón ymcdlda de..rnoooxido de carbono PARK

3.- Sollcitame: HONEYWELL LIFE SAFETY IBERIA

Direccaón; Avda. Conllent, 34 navt: 23.P.l.Pomar de Dall

08916 llml:: lono (B&«lnna)

6.- Fabricante: FIRE \liSION TECHNOl..OOY, S.L.

DlrecdÓl\: el Ma ó.43.Poi. lml.l.c:l> Orases

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i.- Este equipo asr CQmo ms variMles eventuilles aceptadM, est!'i C!1Jlcdticado en el anexo a este CertifiCado y en l{K, documentos ctescri¡»i"m citados en esLeilJilcxo

It·I!! L.abonLorio Oficial J.M. MAclaria¡a {f..OM), Organb;mo dt: Cor.trol por la Comunidªd de Madrid en el t\mbito del Real Decrcro 2367/1985 de 22 de Noviemb-re de 1985, CE'RTif'ICA:

- Que este equipo es :onforme a la Norma UNE 23300;1984.
- Haber (Onfec::ci<mado. nn protooolo ooniidenc:ial de verificacionGS y ensayos. de refe ncia LOM O1.254 AP.

9.- Por el hecho de sum:ol:strur el r:q.,Í]'IO marcado como aspccitica d upartado A6 Jd Añi:XO, el sdícim•m. a1es1i.g.w bajo m propÍl. rc:sponsabiltdad que ésta seajusttl a losdoaumcntmdcscripti vos ciU!dostncl Anexo n1 presente oe:rtific<ldo

10.- El etiquetado deberá i!i!r visible, legible y d Jradero.

11. Si apa C"Ce el signo X 1continuaclll n del número del certificado de conformid1ldclio indica 4ue dl-: equipo C$lÁ :wmetldo a la.coodidoncs especiales p<lm una ¡egum L!ñlimcón mencionadas en el ane:xo11 presenre certificiU.Io.

Mad,id, a 22 de diciembre de 2008

Carlo Fc:mández.Ramoo
DIRECTOR DEL LABORATORIO

A o NavillTtt Izquímlo
Responsable de An::n de Oth::(;lc;n:.:li d.: Oa.ses

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(Este documento solo puede reproducirse íntegramente y sin cambio alguno)

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LABORATORIO OFICIAL J. M. MADARIAGA

APARATOS DE DETECCIÓN Y MEDIDA DE GASES

(A1) ANEXO

(A2) LOMOBMOGA3658

(A.3) Oasignación del Equipo Certificado:

Equipo de di!I.Cocioo y medida de man6xldo de C<Jrbono PAIU<

(A4) I!lescripcl6n dei Eqi!J po Certificado:

Aparato de instal!lción lija de detección ymedida de: mooóx.ido dcatboM. Consta de la untraJ PARK 24.100 o J>ARK 5000-para dos o eincQ1.onas respec:tiwmcnte-del módulode ;cona P·l00;, de los seasores rcmotDS NC0-100 ! OA..StOO.O!.da rn6dulodezona puede lilinentary controlar digir:&.lmente luwa un máxim(lde 16sensores remol. El senior r:.s cleetroquúnla> de tf:5 clccwQdos de NEMOTO modelo NAP SO.q11emuestrea fOI' difusión. Mide: conccntmciune:s dcCOc:n el po(0.300) ppm.COil l'C:5(llución.:k1 ppm.

Di!ip!lnc de d luy af.anúmér.icoque muestra lecnrra de l:ac.onom1Jación yde alanna,yotro5 parimctro!i. Tientns salidas dLontrol progrumables. asl como diversos indicadores de csiado y alrumas acú tica.'i.

(A51 umentos criptivos:

- Manual<le 1,1sua·Jo e Instalación V l.O (17 pp) dt:: 200810
- Memoria de di!tl'io de la central V 1.0 (21 pp), de 2007-10
- Ane.'l:os V 1.O (14 pp) dc 2008...05
- \itrnoria de di!;tl'lo desondll5 eJectroqulmielb (11 pp), de 2008-10-29
- Flnnwa:re V1.() de 2008-05-20

(A6) Marc:ad.o de1Eq1.1ipo Certificado:

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- NO d: Serie...
- L<1.\108MOGAJt158

tA7} Verifi ;; c c; naa ensayos ilndlvkJualos:

Calibración de acmnlcon elap:al1Bdo 3.7 de la Norma UNE 2B00:1911l4.

(AS) Condciolilas eepeciafes. para una u.gura utiJizac¡ón:

Ninguna

(A9) Ccndlciones adicionales:

Ningun3

OFICIAL LABORATORIO J.M. MADARIAGA LOM

RCPOIN49.2/1

Honeywell Life Safety Iberia

Central y Delegación Este: Tel.: 93 4973960 Fax: 93 4658635
Delegación Centro: Tel. 91 1314800 Fax 91 1314899
Delegación Sur: Tel 95 4187011 Fax 95 5601234
Delegación Norte: Tel.: 94 4802625 Fax: 94 4801756
Delegación Portugal: Tel.: 00 351218162636 Fax: 00 351218162637
www.honeywelllifesafety.es ; www.notifier.es