BLAUPUNKT

# User Manual

GAS CONTROL PANEL
BP-CO-3000


*Enjoy it.*

Dear customer:

Please read and understand this operator's manual before operating instrument. Improper use of the gas monitor could result in bodily harm or death. Please don't hesistate to contact us if you have any questions or suggestions. Thanks!

We are honored to have the opportunity to serve you.

Your sincereley,
Security Shop

Statement:

This manual describes the hardware features, installation methods, and maintenance of the BP-CO-3000 control panel.

This manual is suitable for the following personnel: instrument maintenance engineers, field users.

Attention: Before connecting and operating your device, please be advised of the manual.

# CONTENT

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## 1.1. Brief Introduction

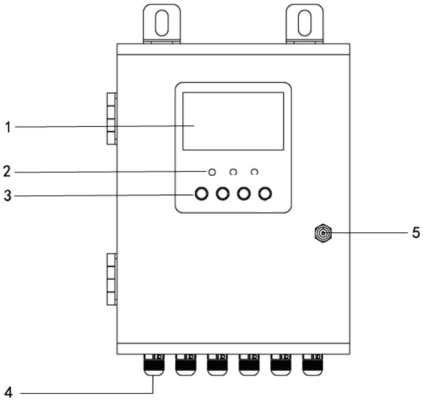
The BP-CO-3000 Control Panel (hereafter referred to as control panel) is a new generation of products, which is specially designed for matching car park detectors.

The product is a dedicated control panel designed for RS485 signal and can be combined with BP-GD300-CO gas detector to form a gas detection alarm and fan linkage control system. The modular design of the product allows for free access to the number of detectors and self-dividing zone of the detectors belong to. Each control panel can access up to 20 detectors. High-brightness LCD color screen display, built-in nine-way relays output, freely assignable control zone controlled by the relays, each control panel can control up to three zones at the same time.

More functions and features of the product:

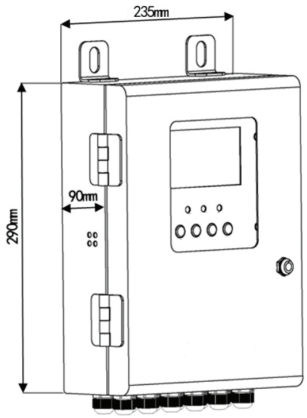
- Equipped with RS485 signal transmitter to display gas concentration in real-time
- High-brightness color display, clearly visible
- Automatic sound and light alarms such as exceeding standards, faults, and so on. Uploading control system
- Modular design, optional number of matching detectors, free combination of 1 ~ 20 channels
- Freely set control zone and relays output
- Multi-level alarm relays, realize alarm interlock control fan.

## 1.2. Description




1. Display
2. Indicator light: power, alarm, fault
3. Key, menu, back, up, down
4. Power / channel lock
5. Keyhole

## 1.3. Dimension



## 1.4. Specifications

| | |
|---|---|
| Gas detected | CO,CO2,Temp&Humidity |
| Power supply | 220VAC/50Hz |
| Channels | 1~20 |
| Output voltage | 24VDC |
| Input signal | RS485 |
| Output signal | RS485 |
| Relays | 9 groups |
| Zone group | 3 |
| Operating temperature | 0℃~40℃ |
| Operating humidity | ≤93%RH |
| Explosion-proof grade | None |
| Rated power | 50W |
| Transmission distance | ≤1000m |
| Dimension | 290mm*235mm*90mm |
| Installation method | Wall-mounted |
| Weight | 3.5kg |

## 2.1. Packing list

Device*1

Operators manual*1


Product certificate*1

Accessory*1

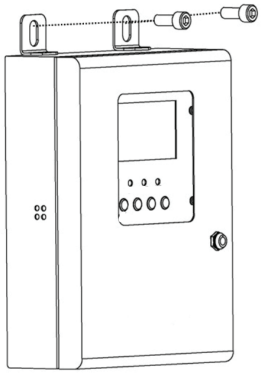
## 2.2. Cautions

• The control panel is non-explosion-proof and is only used in non-explosive atmospheres such as duty rooms and operating rooms. Do not use in hazardous areas.
• The control panel input signal is RS485 and the detector should be connected according to the bus system.
• Do not use the same power source which supplies the large motor equipment.
• Wall-mounted control panel requires a flat, firm wall.
• The installation process must comply with national standards.
• The installation position should ensure that the display is visible, and the reserved space is convenient for the operation of the door opening, wiring debugging, etc.
• Note that the transmission distance between the controller and the detector must not exceed 1000m.
• If there is a lot of dust, high temperature, water splash, rain, corrosive gas, vibration, etc., the installation position should avoid exceeding the working temperature, humidity and protection level of the controller.

## 2.3. Installation

• Select the suitable installation location

• According to the hole above the controller, determine the place drill the hole. Use the M10 expansion screw to firmly fix the two mounting holes to the wall.



Installation diagram

## 2.4. Wiring

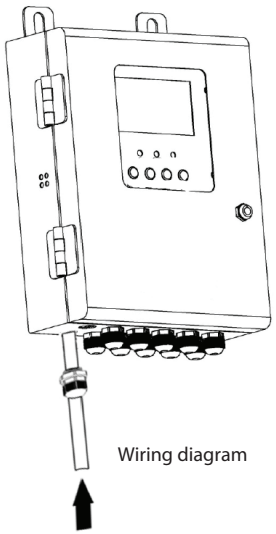
• Be sure to power off before wiring operation

• Open the panel

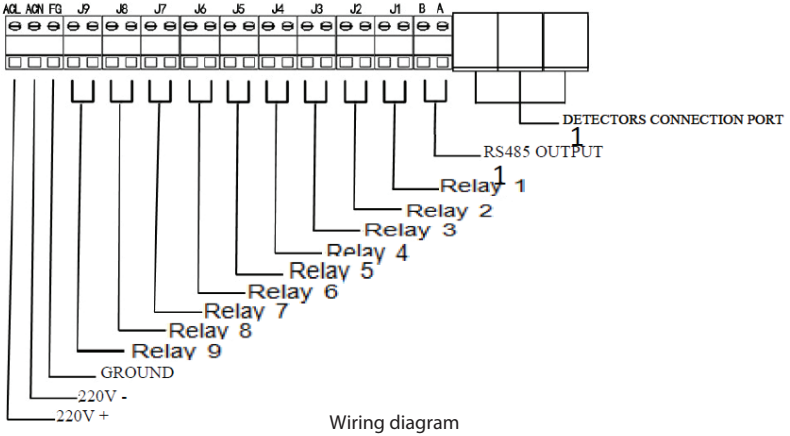
• Unscrew the locking port at the bottom and lead the RVVP3*1.5mm2 cable into the control panel.

• Wiring according to the terminal port identification, pay attention to the one-to-one correspondence between the detector terminal and the control panel terminal.

• It is not necessary to install a channel locking port for the connection of the detector cable.



Wiring diagram




Wiring diagram

## 2.5. Power-on test

• Please confirm that the external wires and terminals are safe before power-on.

• The control panel needs to open the front panel with the key, and the power switch is set to the "on" position.

• When a 220VAC power supply, the control panel power light is always on, and it enters the normal working state.

## 2.6. Maintenance

The control panel should avoid water splashing, dust and other factors. The control panel key should be kept by a special person. It is forbidden to open it freely. The controller should be operated and tested regularly to ensure normal function. When there is a problem with the controller, please contact the manufacturer in time to solve the repair of the instrument and the replacement of the components. The original spare parts must be used and completed by a specially trained person.

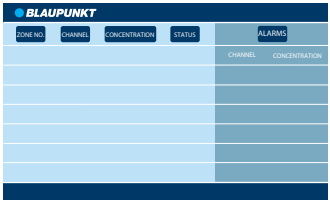
If an option in the menu is misused, restart after power off to restore the pre-operation status.

RS485 address setting, input signal selection, factory setting function are professional settings, non-professionals do not operate, if you need to operate, please contact the manufacturer.

## 3.1. Key instruction


OK : Enter confirm.
BACK : Exit menu
UP : Increase value, move left, lock, unlock
DOWN : Reduce value, move right, clear alarm faults, mute

## 3.2. Main interface

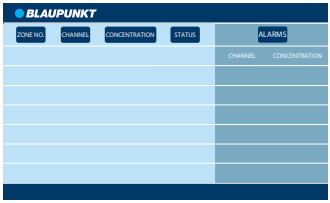



In the normal monitoring state, the main interface displays the zone number, the detector channel number of each zone, the concentration value, status, and the latest alarm records.

## 3.3. Mute and clear current alarm

When the control panel alarms, press the “DOWN” button to mute and clear the current alarm status.

### 3.4. Main interface lock

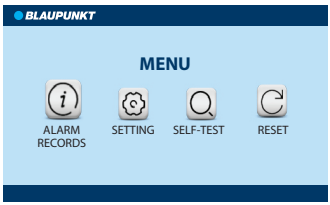



In the normal monitoring state, the main interface is displayed cyclically every seven channels. Press the “UP” button to lock the current seven channels to stop recirculation. Press the “UP” button again to unlock.

### 3.5. Initializing

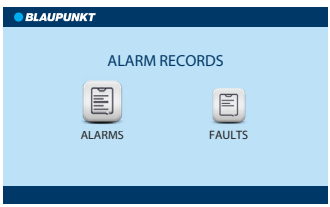

The control panel is power on and normally display the initializing interface.

### 3.6. Menu operation



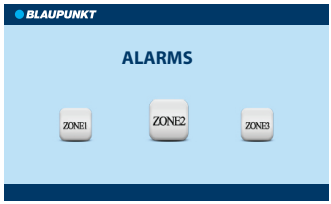

Press the “OK” button on the normal concentration display interface of the control panel to enter the main menu. Four first-level menus will appear: “ALARM RECORDS”, “SETTINGS”, “SELF-TEST” and “RESET”. You can switch these options by pressing the “UP” or “DOWN” keys. The selected option will be enlarged, press “OK” to enter, press “BACK” to return to the main interface.

### 3.7. Alarm records



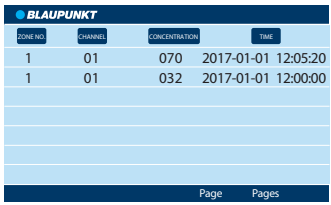

Select “ALARM RECORDS” on the main interface and press “OK” to enter the alarm records menu. Two secondary menus will appear: “ALARMS” and “FAULTS”. Use the "UP" or "DOWN" keys to switch between the two options, press the "OK" button to enter, press the "BACK" button to return to the main interface.

### 3.8. Zone records selection



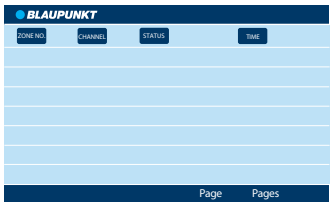

On alarm records interface selects “ALARMS”/ “FAULTS” and press “OK” to enter the zone records selection menu. There are three corresponding zone alarm/fault records. Press “OK” to enter, press “BACK” to return to the records menu.

### 3.9. Alarm list



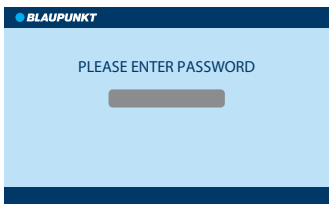

Select the appropriate zone and press “OK” to enter the alarm records. as shown in the second line of concentration 032, time 12:00:00. As shown in the first line of concentration peak 070, time 12:05:20. Press the Back button to return to the zone menu.

### 3.10. Fault list



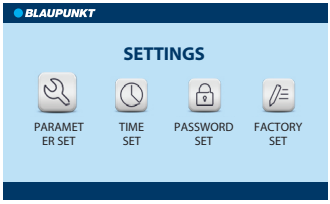

Select the appropriate zone and press “OK” to enter the fault records menu. The menu interface allows you to view the fault zone number, channel, status and time. Press the “BACK” button to return to the zone menu.

### 3.11. Enter password



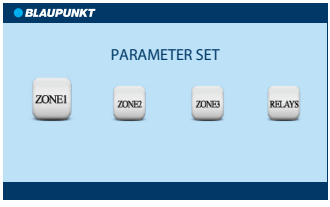

Select “SETTINGS” on the main interface and press “OK” to enter the settings menu. You will be asked to enter password. Press the up and down keys to change the current password. Press the ok key to enter the next password. You will enter the settings menu with the correct password or return to the main interface with the wrong password.

## 3.12. Settings



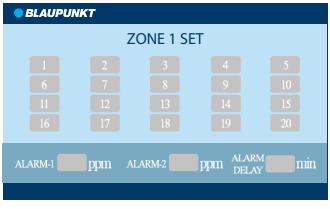

Select “SETTINGS” on the main interface control panel and press “OK” and then and enter the settings menu with correct password. The menu include parameter settings, time set, password set and factory set. Press the OK key to enter, press the Back key to return to the interface, press up, down, left and right to move the selection.

## 3.13. Parameter set




Select “PARAMETER SET” to enter and press “OK” to enter the parameter setting menu. The menu is divided into first, second and third zone and relays settings. Press the OK to enter, press the Back key to return to the settings menu.

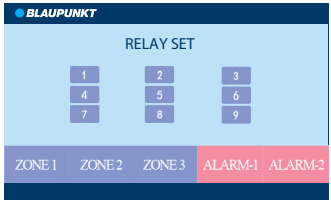
## 3.14. Channel option




The upper part of each zone setting is the detector selection. The current cursor position is green. Press the OK to assign the channel to zone 1 and the channel display turns blue. Then press OK to cancel the channel assignment and the channel display turns gray. If a channel is set in a zone 2 or zone 3, the setting of that channel in zone 1 is automatically cleared;

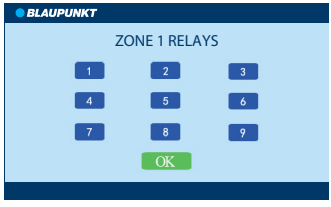
The lower part is the alarm value of zone relay off time delay setting. press the OK to select, then press the up and down to modify the value. After the modification is completed, press the OK to exit the modification.

### 3.15. Relay set



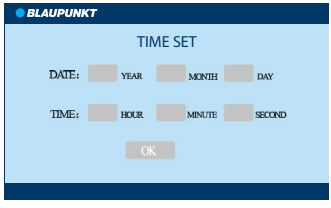

Select “RELAY SET” in the parameter set and press the OK to enter the relay set. Select the zone 1,2,3 and the alarm-1, alarm-2 by the up or down button. The upper part of the figure will display the currently set status of selection zones and alarms. The dark blue logo means set and the light blue logo means not set. Press OK to enter zone relay settings.

### 3.16. Zone relays



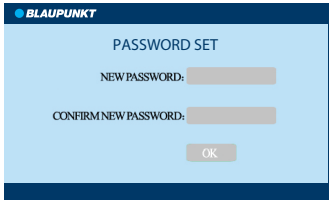

In each zone relay set, select the relay by scrolling up or down, press OK to select, press the OK again to cancel the selection. After the setting is completed, the OK button in the figure displays green, press OK to save and exit.

### 3.17. Time set




Select “TIME SET” and press the OK to modify the current system time. Press OK to move the cursor to modify the year, month, day, hour, minute and second in turn. The up or down button can be used to add or subtract the current value. After all settings are completed, the position of OK is green in the figure, press the OK button again to save the current settings, and press the BACK button to cancel the current settings.

### 3.18. Password set

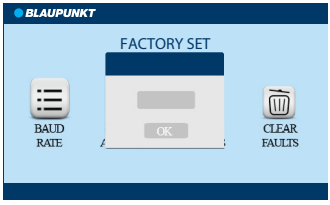



In the setting interface, select “PASSWORD SET” and press the OK to enter the password set menu. Press ok to move the cursor to the right to modify the password in turn. The up or down button can be used to add or subtract the current digit value. If the new password is the same as the one entered in the first pass, the password is successfully modified. If it is different, the modification fails and returns to the previous interface.

### 3.19. Factory set

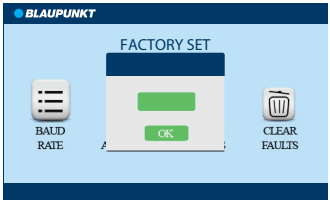

Select “FACTORY SET” and presses ok to enter . The menu include baud rate, my address, clear alarms, clear faults, select one and press OK to enter.

### 3.20. Baud rate




Select “BAUD RATE” and press OK to enter the baud rate setting. You can modify the baud rate of communication between the unit and the host computer. Select the baud rate by turning up or down. The baud rate can be 2400, 4800, 9600, 14400, 19200, 38400, 56000, 115200, 256000. Press OK to confirm.

### 3.21. My address

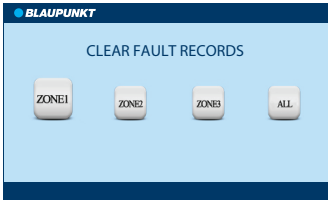



Select “MY ADDRESS” and press OK to enter the my address setting, which can modify the local address when the machine communicates with the host computer. The address range is 0-99, set by the up or down button, and the OK button confirms the modification.

### 3.22. Clear Alarms / Faults

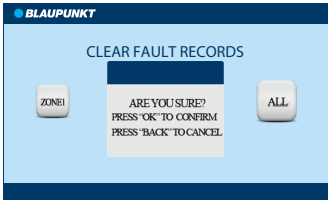

In the setting interface, select “CLEAR ALARMS” or “ CLEAR FAULTS” and press “OK” to enter the zone option setting.

### 3.23. Zone option



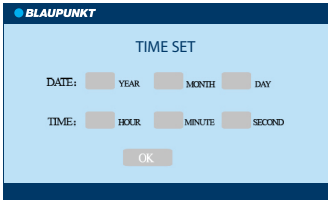

In the factory set interface, select “CLEAR ALARMS” or “CLEAR FAULTS” and press “OK” to enter the zone option setting. Press the up and down keys to select the corresponding zone, press ok to clear the alarm record or fault record of the corresponding zone.

### 3.24. Confirm clear



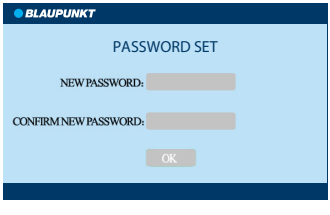

In the "CLEAR ALARMS" or "CLEAR FAULTS" directory, press the "OK" button after selecting the corresponding zone to execute the record clearing program. A prompt will appear prompting you to confirm the operation. Press OK to execute the clear program and press the Back key to return.

### 3.25. Self-test




Select the SELF-TEST in the main interface, press the "OK" button to execute the control panel self-test program. At this time, the normal operation, the fault, the alarm light flash in sequence, the buzzer sounds, and the display screen performs the swipe operation, and the corresponding hardware can be observed during normal operation. (Note: no operation is performed on the external output relay during self-test)

### 3.26. Reset




Select the RESET in the main interface, press the "OK" button to execute the control panel reset program with password. The zone number set by each detector and the zone number corresponding to the relay will be cleared, the alarm-2 will be reset to 50, the alarm-1 will be reset to 25, the delay time will be reset to 10min, the baud rate will be reset to 9600, and the local address will be reset to 01.

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