

OZH100  
Addressable Fire Alarm Control Panel  
**Manual**

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# Capacity, Configuration, wiring settings of JB-QB-OZH100 Fire Alarm Control Panel

## 1. Main Technical Specifications

- 1) Primary Power Supply: 187-242VAC/50HZ
- 2) Standby Batteries: 24V /2.2Ah, Sealed Lead Acid rechargeable Batteries
- 3) Using Environments: Temperature: 0°C ~ +50°C; Relative Humidity: ≤95( ( 40°C±2°C)
- 4) Capacity: Single Loop, 252 points

## 2. Components

It is a wall-mounted unit, composed of

- 1) Main Board: It contains LCD display, keyboard, LED and speaker.
- 2) Power supply board: It provides 2 outputs: 28V and 5V. The standard storage batteries is 24V/2.2Ah.
- 3) Dimension of the cabinet: 370\*240\*60 mm

## 3. Wiring settings:

- 1) Alarm units: 2 Bus wires(without polarity)
- 2) Sounder & Strobe: 4 wires, Power supply wires 28v+ and 28v- and Signal wires ZX+ and ZX-.
- 3) Wiring requirements;
  - a. The 2 Signal Bus wires (non-polarity) are RVS twisted-pair and the sectional area of them is not less than 1.0 mm<sup>2</sup>. They can be equipped according to the practical conditions of the project.
  - b. The DC28V Output wire is BV wire and the sectional acreage is not less than 2.5 mm<sup>2</sup>.
  - c. Sectional acreage for the trunk wire of the Two Bus wires is not less than 1 mm<sup>2</sup>.
  - d. The total resistance on each loop of the Control Panel is less than 20Ω.

## 4. Description of the wiring terminals

The units has 2 bus wires and 2 power supply wires. The terminals are on the power supply board.

28V+	GND	ZX-	ZX+
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Note: There is 28V output when supplied by primary power; There is 24V output when supplied by standby battery.

# Operation Instruction of OZH100

## Fire Alarm Control Panel

### 1. Keyboard Description:

There are 25 keys on the faceplate, 10 numeric keys and 15 function keys.

1. **【SILENCE】** The speaker will emit fire alarm or fault sound when there is fire or fault. Press the key, the sound will stop and the silence LED(yellow) will be on.
2. **【RESET】** In the operation menu, press the key and the it will back to the previous page. In the main interface, press the key and the system will be reset.
3. **【←】【→】【↑】【↓】** Used for moving the cursors or display line.
4. **【ENTER/MENU】** It is menu key in the main interface and used to enter main menu interface. It is confirmation key in the menu interface.
5. **【\*】 【#】** It has different functions under different interfaces. It is generally used to increase or decrease the address codes.
6. **【START DEVICE】 【STOP DEVICE】** Used to start/ stop one single device. It is only effective under the main interface.Press the key, the menu of "Start/ Stop device" will appear. After enter the proper data and press **【 START DEVICE】** or **【 STOP DEVICE】** , the device will be started or stopped.
7. **【AUTO/MENI】** Auto/Manual switch
8. **【 START SOUNDER】 【STOP SOUNDER】** Used to start/stop all sounder & strobes. It is effective under any status.
9. **【F1/ SELF CHECK】** Under the main interface, it is a Self Check key and used for self - check of the units. Under menu interface, it is F1 extension key. It has different functions under different interfaces.
10. **【Numerical Key】** Used to enter numbers.

### 2. Main Interface

It has two interface.One is interface with ORENA logo and the other is abnormal information display. The unit will display ORENA logo after supplied by power supply source. It will be on abnormal information display when there is fire alarm or fault. Under the abnormal information interface, you can inquire it manually. It will display the information of highest grade which can't be switched and will display continuously while you don't inquire them manually. When there is fire alarm, the first fire alarm and total fire alarm information will be displayed on the top column of the LCD.

- 1) When there is one fire alarm, it will display below. If there are more fire alarm information, the total column will display the quantity of information and every information will be automatically scrolled on the information display area.

FIRSTALARM:001 TYP	⏪
<b>FIRE</b> ADDR:001 TYP	⏪
AT:	
MAY.12 12:12 001/001	

Line 1: It will display the first fire alarm information, including address and icon of the alarming device. Please refer to the Appendix A for the icon and type of the units.

Line 2: information type. It will display including FIRE, START, FBACK, FAULT AND ISOLA and address, type and icon of the abnormal units

Line 3: It describes installed location of the abnormal devices.

Line 4: The time when the abnormal information happens.

The serial number of the current information/ the total number of the type.

### 3. Menu Interface

Under the main interface, press **【ENTER / MENU】** and enter the password to get to the main menu window. It contains SET, OPERATE, INQUIRE, TOOS and SERVICE.

#### ( 1 ) Set Menu

##### 1) Register the loop no.

The loop has to be registered before in use. You should enter the password at first and then the LCD will display "press **【ENTER】** to register". Press it and the registration will start. At the meantime, the LCD will show registered information, including total numbers, address code, type, etc. For example:

```
Registering....  
Total:015 / 015  
Addr:123 Typ:(SmokDt)  
Data Saving....
```

The registering time depends on the quantity of devices(detectors, modules, etc.) After registering, "Data saving ... " will be displayed on the the last line of the LCD. Then all the information will be saved. After it, the system will reset once.

##### 2) Set Time and Date

Set the current time and date.

#### ( 2 ) Operate Menu

##### 1) Isolation Operation

Isolate a detectors. Get to the menu and enter the address code of devices to be isolated. Then, the LCD will display type and installed location for confirmation. Press **【ENTER / MENU】** and the isolation will be completed. If the LCD displays "Success" and the isolation LED will be on, it means the operation is ok. Otherwise, it will display "Failure".

The successfully isolated address will be display on "ISOLA" information column. If the isolated address is on the "Fault" column, it will be moved to "ISOLA" column after isolation operation.

##### 2) Release Isolation

The operation is the same as Isolation Operation. It will release the isolation of certain address.

##### 3) Test Analog Value

Test current value of certain device and the value may display in numerical value or in curve.

### ( 3 ) Program

- 1) **Edit for every devices, including type, install location,remote repeater No., etc.**  
**You need to enter right password at first.**

```
Address:001
Type:003   Loca:000
ORGp:001   ANDA:000
ANDB:000   RAUN:001
```

Line 1: Address code of detectors or modules. It can be increased or decreased by pressing # or \* .

Line 2: Type of the devices. Effective value is 1—32. Please refer to the Device type, type value and icon. Note: "0" means that the device is not installed.

Line 3: **ORGp**: OR group No. There are 252 OR groups totally. Please enter one certain OR group number here. When the device(detector or module) of the address code alarms, all the units of the OR group will be link-controlled.

**ANDA**: AND A Group. When the units(detectors or modules) of two address code alarm, the units of the AND group will be link-controlled.

Line 4: **ANDB**: AND B Group. Enter group number here. When the AND A group number and the AND B group number is the same, all the devices of the AND group will be link-controlled if the two address codes alarm. **RAUN**: Enter the unit number of the remote annunciator. In that case, when devices(detector/module) of the address code emits fire alarm or trouble signal, the information will be transferred to the remote annunciator and displayed on it.

#### 2) Location Code

Installed location of devices is described with 18 Chinese characters(Standard Chinese characters library). The unit can program 252 installed location information. You enter number of installed location. After finishing one installed location information, you may go to the interface of the next information by pressing \* or #.

```
Location Code: 001
Input Mode:abc
L:
```

Line 1: installed location.

Line 2: input mode, including lower case letters (e.g.abc), capital letters(e.g. ABC) and numbers(e.g. 123).

Line 3 : "L" is the position where the characters will display.

Input mode: Letters, numbers, punctuation marks and common characters can be entered by pressing the numerical keys. Punctuation marks can be entered by pressing "1" frequently. Common characters can be entered by pressing "0" . Characters before the cursor can be eliminated by pressing "F1".

#### 3) OR Logic Group

Program OR Logic Group is the linkage OR Logic Group editing menu. 24 address codes of devices at most can be edited in one OR Logic Group. It will display in 2 pages. There are 252 OR groups at most.

**Note:** the address in OR Group has to be the one needed to be link-controlled. Press "△" "▽" "▷" and "◁" to move the cursor. Press \* or # to move the cursor to the the next or last group.

Copy function: If the address code where the cursor is > 0, the address code will be plus 1 by press "F1" and be copied to the next position. If the address code is 0, 000 will be copied to the next position by pressing F1.

```
Page1 of OR Group001
001*002*008*023
005*000*000*000
000*000*000*000
```

#### 4) AND Logic Group

As to the program of AND Logic Group, please refer to the 3) OR Logic Group.

### ( 4 ) Inquire

#### 1) System information

It will display the numbers of smoke detectors, heat detectors, manual call points, interface modules, etc.and total numbers.

#### 2) Detailed information

You can inquire detailed information of all the devices of the whole system, including type, current status, current , installed location, etc. There is one item per page.

Line 1: address code, device type,.

Line 2:current status and current value.

Line 3: 0: OR Group Number      A: AND Group Number(A)      B: AND Group Number(B)

R: remote repeater No.

Line 4: Description of installed location

```
001Typ:Manual Call Pt
State:OK    Cur: 44
O: 1A: 0B: 0R: 0
Loc:
```

#### 3) Fire History

The unit will record the fire events. There are 2 items per page and the amount of records is 999 at most.

The latest events will always be at the top-front.Events records include No., device type, address code, fire status, type icon, time and date, etc.

```
>001(ManuCP)002 Fire
At:2010/02/02 04:28
>002(SmokDt)003 Fire
At:2010/02/02 06:28
```

#### 4) Other History

It can also inquire other records besides fire events, including trouble, startup, feedback records, etc. There are 2 items per page and the amount of records is 999 at most. The latest events will always be at the top-front. The records include No., device type, address code, event type status, time and date, etc.

#### 5) Tools Menu

#### 6) Service Menu

## 4. Start/stop device manually

In the main interface, one single device link-controlled will be stopped/started manually by pressing **【START DEVICE】** or **【STOP DEVICE】** .

Line 2: Enter address code of device to be operated.

Line 3: Device type

Line 4: Description of installed location.

After the address code is set, the device will be stopped or started by pressing **【START DEVICE】** or **【STOP DEVICE】** .

```
START&STOP
Enter Addr. :009
Typ:Output Module
Loc:
```

Note: It is only be effective as to the device of linkage control.

## 5. Troubleshooting Guide

1. There is no display on the LCD. Please check the LCD wire connected to the main board is ok.
2. There is no fire or fault sound. Please check the speaker wire is well connected to the main board.
3. The devices don't work. Please check Bus or 24V output wire is well connected.
4. Don't change or disassembly the parts and wiring of devices.
5. The unit emits fault of backup battery. Please check the battery is damaged or the power supply wire is broken.

**Note:** When the problems of the unit can't be solved, don't disassembly it by yourself. Please contact ORENA company as soon as possible.

## Appendix:

### A. Device type and icon

No.	Description	Icon	No.	Description	Icon
1	Smoke Detector		2	Heat Detector	
3	Manual call point		4	Interface Module	
5	Water-flow Indicator		6	Hydrant button	
7	Pressure Switch		8	Signal Valve	
9	Control Module		10	Strobe light	
11	Smoke extractor exhaust fan		12	Ventilator	
13	Blow valve		14	Smoke evacuation valve	
15	Fire damper		16	Emergency light lamp	
17	Shutter		18	Air conditioner	
19	Alarm Bell		20	Broadcasting	
21	Non-Fire Power Supply		22	Fire pumper	
23	Dynamotor		24	Gas Extinguishing	
25	Standby Module		26	Force landing	
27	Hydrant lamp		28	Irrigation pump	
29	User-defined A		30	User-defined B	
31	User-defined C		32	User-defined D	

### B. Device description and abbreviations

SmokDt	Smoke Detector
HeatDt	Heat Detector
ManuCP	Manual Call Point
IF^Mod	Interface Module
IP^Mod)	Input Module
OP^Mod	Output Module
Isola	Isolate
Manual Call Pt	Manual Call Point