

OZH4800E

Addressable Fire Alarm Control Panel

Manual

V1.1



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Capacity, Configuration, Wires and Settings of OZH4800E Fire Alarm Control Panel

1. Main Specifications

- 1) Primary Power Supply: 220V \pm 10%, 50Hz \pm 1%
- 2) Standby Batteries: 24V/4AH, Sealed Lead Acid rechargeable Batteries
- 3) Power Supply Output: 24VDC @ 5.0 Amps (4 Amps available for system power)
- 4) SLC loops: 2, 4, 6 or 8 (class A, "style 6 or 7" or class B, "style 4")
- 5) Devices per loop: 192 sensors & modules
- 6) Addresses per panel: 1536 max.
- 7) Display: 15 line x 40 character LCD (600 characters total)
- 8) Communication Port: RS232/RS485
- 9) Applying Environments: Temperature 0 ~50 , Relative Humidity \leq 95% (40 \pm 2)
- 10) Dimensions (D \times W \times H): 110 \times 335 \times 435mm
- 11) Weight: 16Kg

2. Components

This is a wall-mounting equipment composed of the wall-mounting box, the mainframe, the extension (also Loop Board) and the Power Supply.

- 1) The mainframe contains the main board, the LCD display, the keyboard, the indicator, the loudhailer, etc.
- 2) The extension computer contains 2 pieces of extension board and the exterior Bus wires, etc.
- 3) The Power Supply contains the Fire Protection Power Supply and the Standby Storage Batteres. The Fire Protection Power Supply provides 2 Outputs: 24V and 5V. The Standby Storage Batteries is 24V/4AH.

3. Wires

- 1) Alarm units: 2 Bus wires (non-polarity)
- 2) Interface Module: 4 Bus wires, 2 signal wires (non-polarity), 2 Power Supply wires (24V, 0V)
- 3) Output Module: 4 Bus wires, 2 signal wires (non-polarity), 2 Power Supply wires (24V, 0V)
- 4) Wiring requirements:
 - a. The 2 Signal Bus wires (non-polarity) are RVS twisted-pair and the sectional acreage of them is no less than 1.0 mm². They can be equipped according to the practical conditions of the project.
 - b. The DC24V Output wire is BV wire and the sectional acreage is no less than 2.5 mm².

- c. Sectional acreage for the trunk wire of the Two Bus wires is no less than 1 mm².
- d. The total resistance on each loop of the Control Panel is less than 20Ω.

4. Settings

1) The address must be setup for the extension board before power-up for the first time. Method: For example, if you want to setup address for an extension board, you have to turn bit 1 of the bit 8 slide switch to ON, and turn the other bit 7 to OFF. So the address for this extension board is 1, corresponding with loop 1, 2, 3 and 4. If you want to setup 2 extension boards, turn the bit 2 of the bit 8 slide switch on the second extension board to ON, and turn the other bits to OFF. So the address for the second extension board is 2, corresponding with loop 5, 6, 7 and 8.

2) Register must be done when power-up for the first time or there is change on loop devices. Before register, select and click the loop number that need register, then register will be completed automatically showing the total installation points of the loop.

5. Description of the wiring terminals

Titles of the Loop Bus wire and the 24V Output wiring terminals:

24V	GND	ZX1+	ZX1-	ZX2+	ZX2-	ZX3+	ZX3-	ZX4+	ZX4-
------------	------------	-------------	-------------	-------------	-------------	-------------	-------------	-------------	-------------

ZXx+, ZXx-: Bus wires (non-polarity)

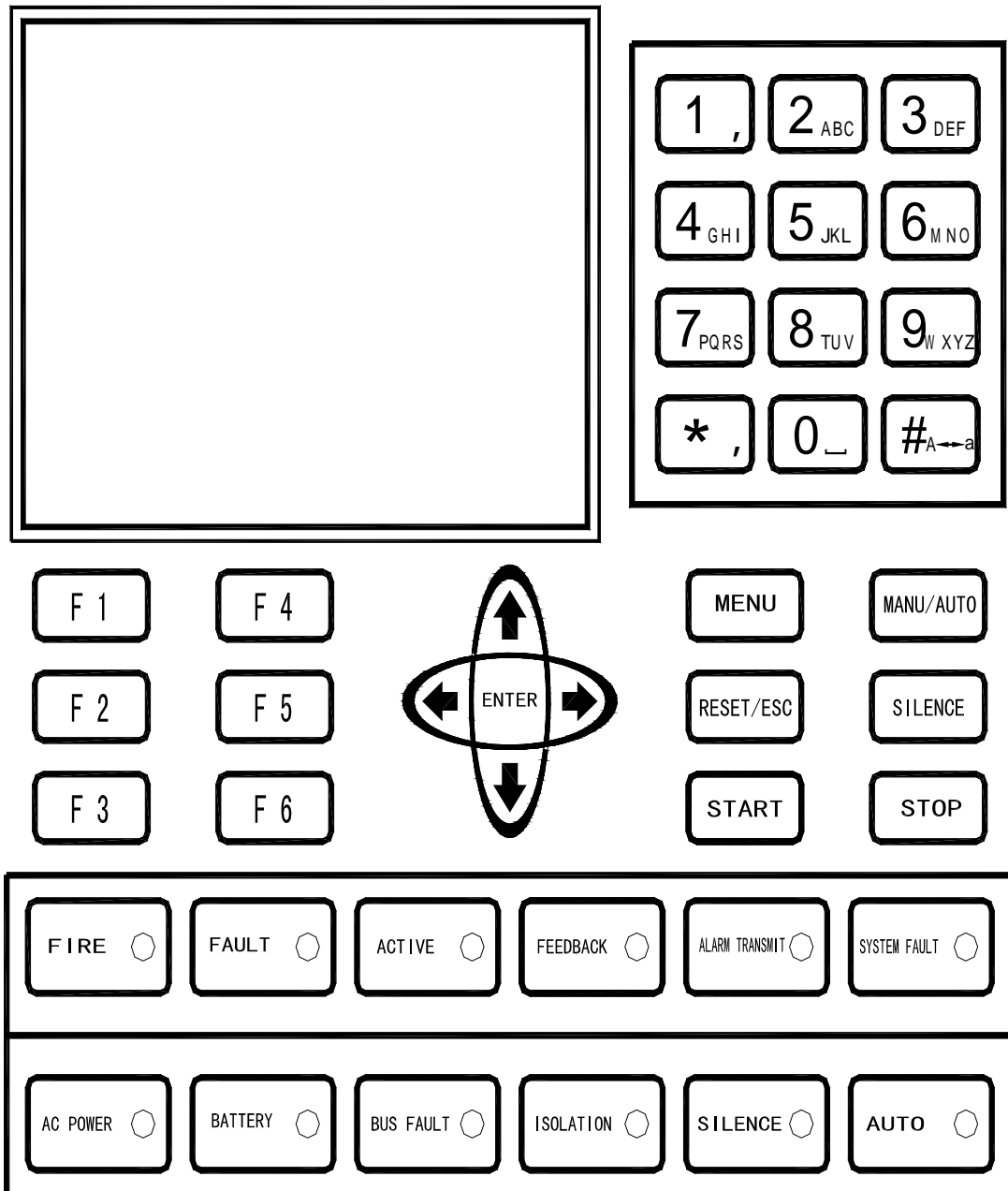
Loop number = (Address of the extension board - 1) * 4 + ZXx

Operation Instruction of OZH4800E

Fire Alarm Control Panel

1. Keyboard and display

The keyboard, indicator of the OZH4800E Fire Alarm Control Panel and the descriptions are as the following:



(1) The left part on top is the LCD display screen and the right is the keyboard of numbers. The keyboard of numbers is used for entering numbers and entering various kinds of characters when programming at the installation location. Details of usage can

take reference to Introduction of Installation Location Programming.

(2) The left side of the middle part are Function extended Keys. In the center are the Direction and Enter Keys. In the right side are Function Keys. Functions of the Keys are as the following:

1. **【MENU】** : Used for entering the window of the main menu.
2. **【RESET/ESC】** : In the operation menu, ESC functions and it is used for turning back to the previous page. In the Homepage, RESET functions and it is used for resetting the system.
3. **【START】** , **【STOP】** : Used for start and stop the module.
4. **【MANU/AUTO】** : Switch of Manual and Automatism. Used for selecting whether to apply the automatic linkage function.
5. **【SILENCE】** :Turning off the alarm of fault or fire and lighting the yellow SILENCE indicator.
6. **【F1】 ~ 【F6】** : Extension Keys. See details in operations of the related menu.
7. **【*】** : Operation of plus 1 on numerical value in a certain windows.
8. **【#】** : Operation of minus 1 on numerical value in a certain windows.
9. **【<】** **【>】** **【↑】** **【↓】** : These direction keys are used for moving the cursor position, switching among options, paging up and down, select numbers, etc.
10. **【ENTER】** : Press this key to perform function of the selected option.

(3) At the bottom are the indicators of current state.

1. **『FIRE』**
Fire alarm indicator, showing red when there is fire and going out when the system is resumed.
2. **『FAULT』**
Fault indicator, showing yellow when there is a fault and going out when the system is resumed or the fault is corrected.
3. **『ACTIVE』**
Startup indicator, showing red when there is a startup signal and going out when the system is resumed or all the startup are stopped.
4. **『FEEDBACK』**
Feedback indicator, showing red when there is feedback signal and going out when the system is resumed or the all the feedback are renewed.
5. **『ALARM TRANSMIT』**
Fire alarm transmitting indicator, showing green when the control panel is transmitting fire alarm signals to the external equipments and going out when the system is resumed.
6. **『SYSTEM FAULT』**
System fault indicator, showing yellow when fault occurs and the control panel cannot work normally. Going out when fault is removed and the control panel works normally.
7. **『AC POWER』**
Alternating current power state indicator, yellow and green. Showing green means Alternating current power is working as the power supply. Showing yellow means Alternating current power is not working and the Battery is the power supply.

8. 『**BATTERY**』

Battery state indicator, yellow and green. Showing green means the battery works as the power supply. Showing yellow means the battery is failure. Going out when both the AC primary power supply and the battery works.

9. 『**BUS FAULT**』

Bus wire fault indicator, showing yellow when short circuit, open circuit or all equipments on this Bus wire fault occurs to the external Bus wire. Otherwise, it goes out.

10. 『**ISOLATION**』

Isolation indicator, showing yellow at Isolation operation and going out when all isolations are removed.

11. 『**AUTO**』












Automation indicator, showing green continuously when the control panel is set to automatic linkage control function.

2. Operation Instruction

The OZH4800E Fire Alarm Control Panel contains 5 functional menu and each of them performs different functions. They are: Set, Operate, Program, Inquire, Register. Each one of the functional menu has different tree menus for the user and each of the operation is completed through the keyboard and the LCD display. Besides, when it isn't in operation, the LCD display will turn to one of the 2 states: Automatic or Manual. If the system is working normally and nothing wrong, it will turn to factory logo menu. It is also the initial menu at power up, see picture 2 as the following. Otherwise, if one or several of abnormal information of the system like Fire alarm, Startup, Feedback, Fault, Isolation shows, it will turn to signal indicating menu, see picture 3 as the following.




Picture 2


	01.001  05 / 05 / 2007 11 : 59 MEETINGROOM OF ORENA BUILDING F6	
	01.001  05 / 05 / 2007 11 : 59 MEETINGROOM OF ORENA BUILDING F5	001 / 001
		
		
	01.100  05 / 06 / 2007 18 : 11 MEETINGROOM OF ORENA BUILDING , FLOOR 5	001 / 001
	01.101  05 / 06 / 2007 18 : 30 MEETINGROOM OF ORENA BUILDING , FLOOR 5	001 / 001
	F a u l t : 01.100 05 / 06 / 2007 18 : 11 I s o l a t e : 01.101 05 / 06 / 2007 18 : 30	


Picture 3


(1) Format of the information display Menu


As picture 3 shows, the information display menu contains 7 columns on it and each column has a title captioned with an icon. Descriptions of each icon are as the following:


 First time Fire Alarm, showing detailed information of the fire alarm happened at the first time.


 Fire Alarm, showing all of the Fire Alarms information.

 Startup, showing all of the startup information.

 Feedback, showing all of the feedback information.

 Fault, showing all of the fault information.

 Isolation, showing all of the isolation information.

 Strobe, showing fault information happened at the first time and isolation information happened at the first time of the Strobe light.

1. The Fire Alarm, Startup, Feedback, Fault, Isolation Columns share the same display format except for the First time Fire Alarm and the Strobe column, for more details see the following:

Line 1 : Loop No., Address No., Alarm Type icon, Day/Month/Year, Hour: Minute, Current serial number/Total


Line 2 : Illustration of Installation location

Example: Fire Alarm

01.001  05/05/2007 11: 59 008/101

MEETINGROOM OF ORENA BUILDING F5

The meaning is: Loop 1 address 1 is a smoke detector and was installed at the MEETINGROOM OF ORENA BUILDING F5. It sent fire alarm at May 5th, 2007. There are 101 times of fire alarm and this one is the 8th fire alarm.

Remarks:  is the icon of smoke detector, and icons of the other equipments can take reference of **Appendix A**.

2. Format of the First time Fire Alarm is basically the same as the columns mentioned above. The difference is that there is no Current serial number/Total. Because there is only one First time Fire Alarm.

3. Format of Strobe column:

Line 1: Fault: Loop No., Address No., Day/Month/Year, Hour: Minute.

Line 2: Isolation: Loop No., Address No., Day/Month/Year, Hour: Minute.

This column shows Fault information happened at the first time and isolation information happened at the first time of the Strobe light. Line one shows the former and Line 2 shows the latter.

Example:

Fault 01.100 05/06/2007 18: 11

Isolate: 01.101 05/06/2007 18: 11

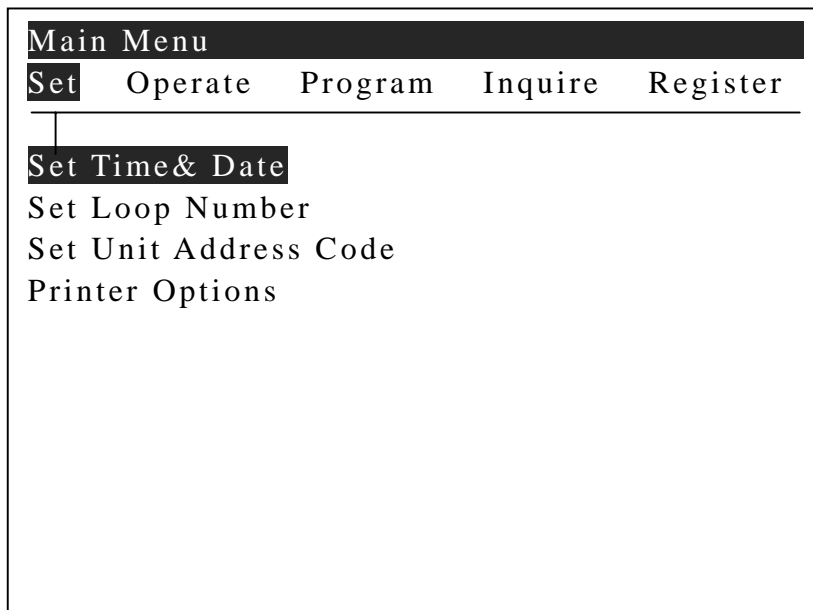
This column does not show the installation location information. Because information shown in this column can be found correspondingly the complete information in the Fault and Isolation column.

4. Display of the Fire Alarm and Strobe is static. The other columns are dynamic. They are rolling displayed. All the information will display on the screen by time sequence repeatedly. The renew time is about 3 seconds. Meanwhile, one can also consult manually to quick view the information. Press **【** **】** and **【** **】** to select the target column, while press **【** **】** and **【** **】** to view the information in the column in order and in reverse order.

(2) Set Menu

Press **【MENU】** under the factory logo menu or information menu and enter a password of 6 numbers to get the main menu window. In the main menu, press **【** **】** and **【** **】** to select the aimed options. Picture 4 is the Set menu. As the picture shows, the main menu contains 4 Submenus and you can make switch between them by pressing **【** **】** and **【** **】**.

Picture 4

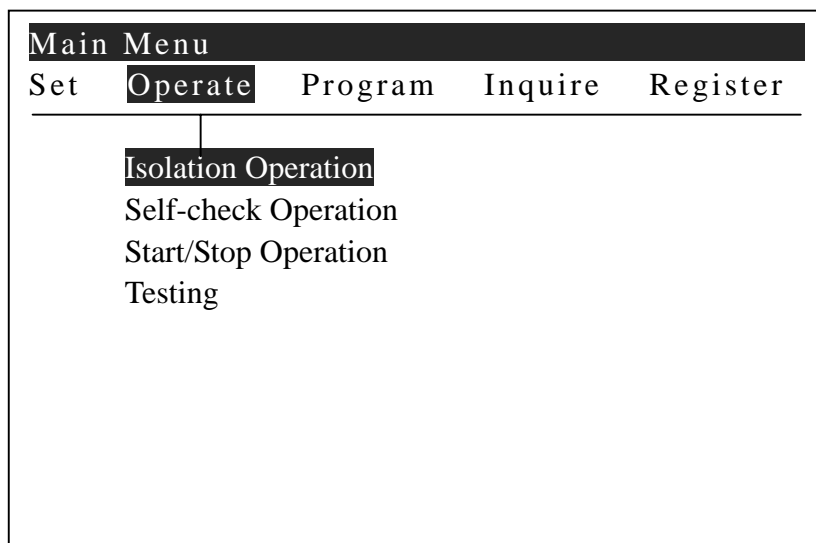


1. Set Time &Date: Set the current time and date.
2. Set Loop No.: Set the actual loop numbers that installed in the control panel, Range of loop number is 1~8.
3. Set Unit Address Code: Set the address of the current control panel, Range is 1~255.
4. Printer options: Set whether using the Mini Printer. This function is prepared for the future extension. Currently we choose not to use this function.

<input type="checkbox"/>	Use	Mini-printer	Not in use
<input checked="" type="checkbox"/>	Use	Mini-printer	In use

(3)Operate Menu

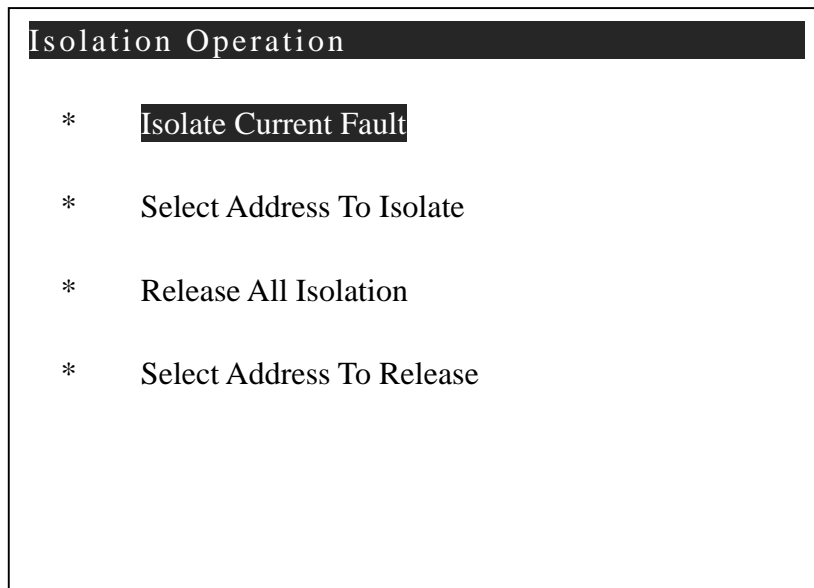
Picture 5 below is the Operate Menu.



Picture 5

1) Submenu Isolation Operation

Operate/Isolation Operation has 4 Submenus as picture 6 shows:



Picture 6

- [1] **Isolate Current Fault:** Isolate the current fault. This order is only valid when there is a fault at that time. Running this order will transfer all the Fault information into Shield Column to be shielding information and fault state is removed. If this operation succeed, the system will show "OK".
- [2] **Select Address To Isolate:** Select this order, the user can make shield operation to 1~16 points of address. It will show an editing window as picture 7 for users to enter an address of 5 numbers, in which the 2 initial number is Loop number and the last 3 number are Address number. For example, "01001", here "01" is the Loop number and "001" is the address. Please notice that the valid value of Loop number is 01~08 and the valid value of Address number is 001~192. When one enters an invalid number the system shows "Fail" and this order is not executed. Please enter the numbers from left to right and from the top down accordingly. "00000" is the sign of End. If there is address entered after "00000", they will be neglected.

Key functions of Picture 7

Direction keys can move the cursor up and down, left and right.

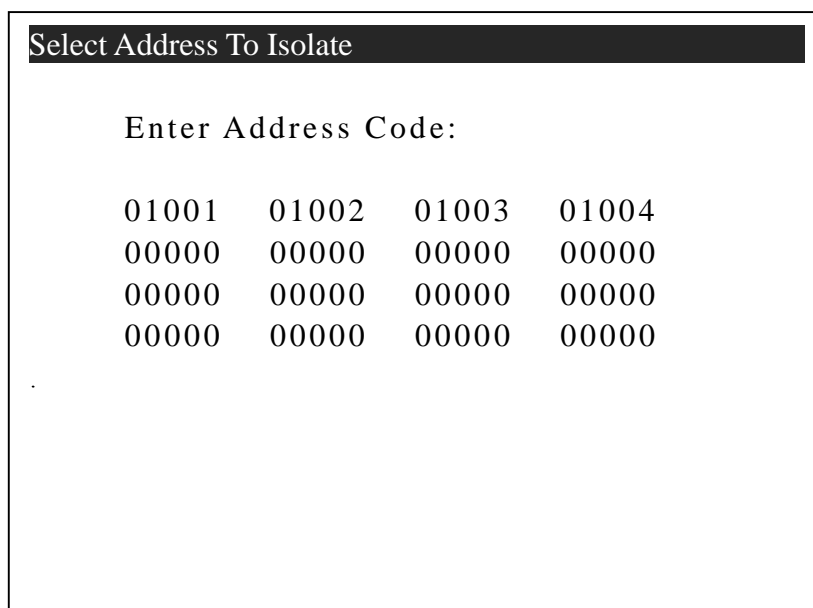
Number keys are used for entering the numbers.

Enter key means conform and carry out the order.

【*】 key can initialize the window and clear up all information so for the users to re-enter the address.

- [3] **Release All Isolation:** Release all the isolation and all the isolation are removed. This order is only valid when there is a isolation information. If operation is succeed, the system shows "OK".
- [4] **Select Address To Release:** Select an address to remove the isolate. Operation of this order is the same as "Select Address To Isolate" except for a

deference that this order releases the Isolation of a single device, but not to Isolate.



Picture 7

2) Submenu Self-check Operation

This order performs the Self-check operation including all of the state indicators, LCD display All Cleared, All displayed, Output faults, Fire alarms, etc.

3) Submenu Start/Stop Operation

This order performs the Start/Stop Operation of the module. It can start/stop 1 module at each time. Choose this menu and click **【ENTER】**, it will show the operating window as picture 8 shows. In this window, first enter the Loop number and Address number (must be valid as mentioned above), at the same time the bottom of the window will show the icon, name and the location of the equipment installed at the address number.

Direction key, Number key: move the cursor and enter the numbers.

【*】 : plus 1 to the Address No.

【#】 : minus 1 to the Address No.

【START】 : Start the Selected Address No. (The address No. must be Input module)

【STOP】 : Start the Selected Address No. (The address No. must be Output module)

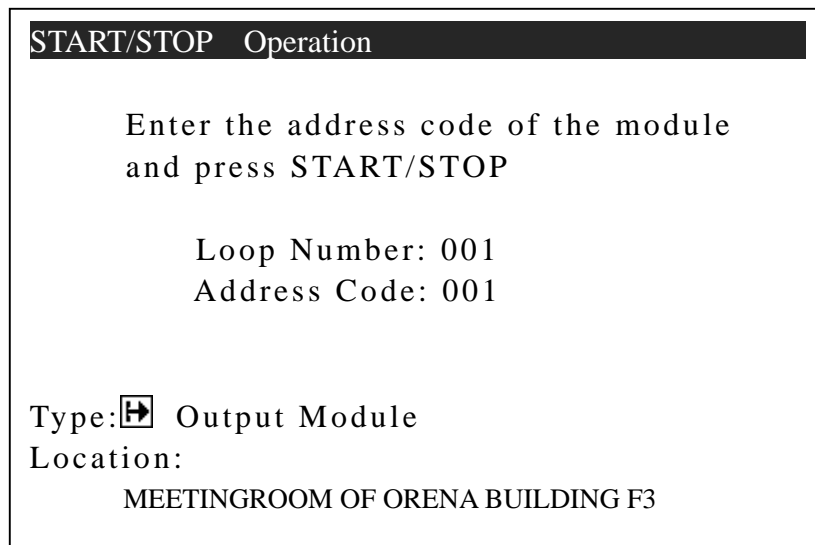
Under factory logo window or information display menu, press **【START】** or **【STOP】**, enter the same password can go straight into the Start/Stop window.

4) Subsidiary Testing

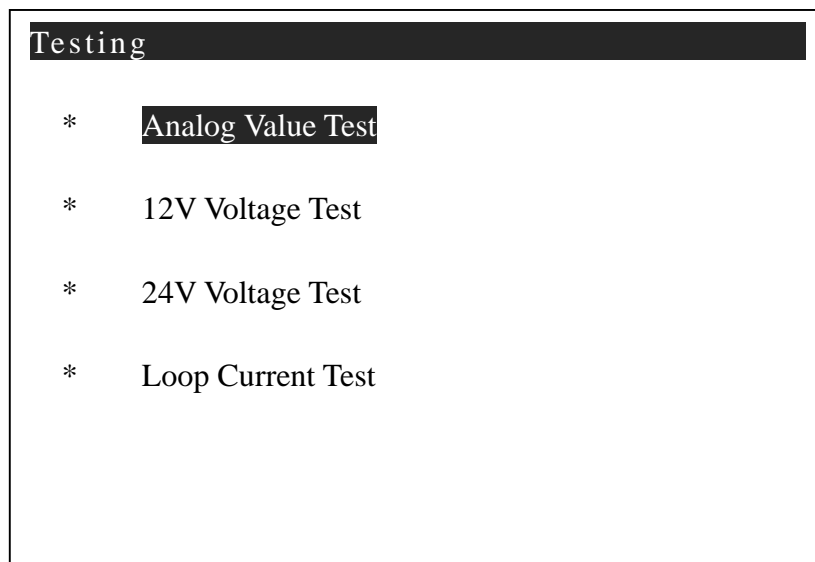
Operate/Testing is the testing menu including Voltage testing and Current testing. Voltage testing covers 3 kinds which are all continuously real-time enquiry from the Control Panel. Data acquired are all tested on real-time and reflect the current state of the single device which are shown on the LCD in curve graph way. Current testing is only 1 kind. The control panel enquires a certain loop and get the equivalent value of the working current of all the 192 point on that loop. This will be shown on the LCD

display. There are 4 Submenus under Operate/Testing, as picture 9 shows. Therein, the front 3 options are Voltage testing and the last one is Current testing.

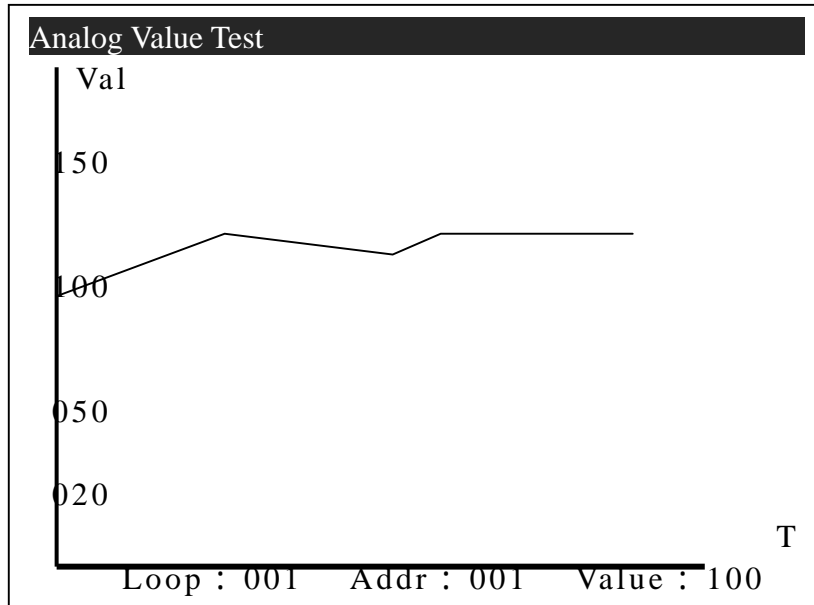
Analog Value Test: Testing the analog value of each single device. The analog value means deferent to deferent single devices. For example, Smoke detector is the equivalent value of the smoke concentration, Heat detector is the equivalent value of temperature. The manual call point and the various kinds of modules would be a specific value, depending on the specific conditions. This order is mainly used for testing the sensitivity of smoke and temperature. Choose this option in the menu and click ENTER, it will show the Analog Value Test operating window as picture 10 shows.



Picture 8



Picture 9



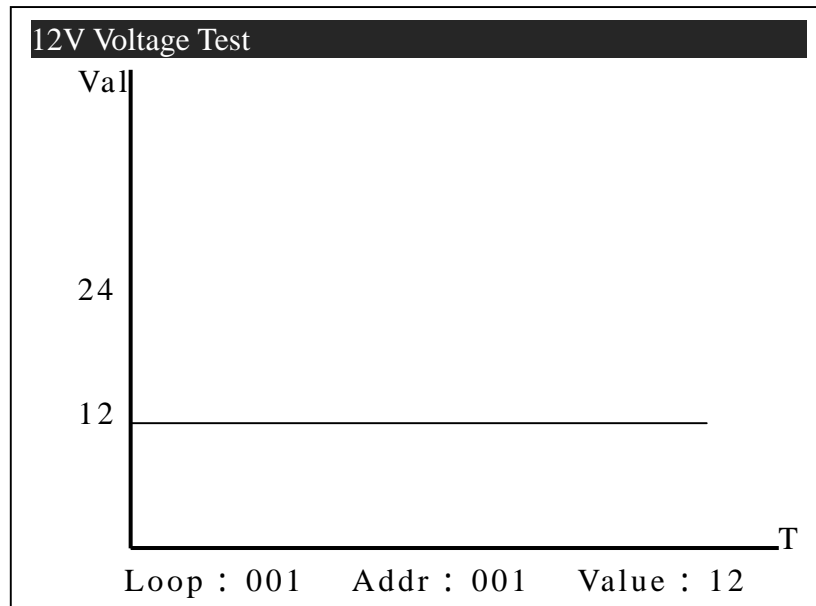
Picture 10

In picture 10, the Y-coordinate shows the value that acquired in each test, the curve-line above is made by linking the tested points. (Remarks: The maximum value that can be shown on the LCD display is 200, numbers above 200 will be shown in term of 200.)

Key functions of Picture 10:

- 【←】: degression repeatedly of the Loop number
- 【→】: increase by degrees of the Loop number
- 【↑】: degression repeatedly of the Address number
- 【↓】: increase by degrees of the Address number
- 【ENTER】: Perform the testing function

12V Voltage Test: Testing the Bus wire 12V Voltage of each single device. The communication signal between the control panel and the single device is pulse signal with a high level of 24V and a low level of 12V. This order tests the low voltage range between the 2 terminals of the pulse signal and show them on the LCD display in a curve graph way. As picture 11 shows, the key functions are the same as keys on Analog Value Test.



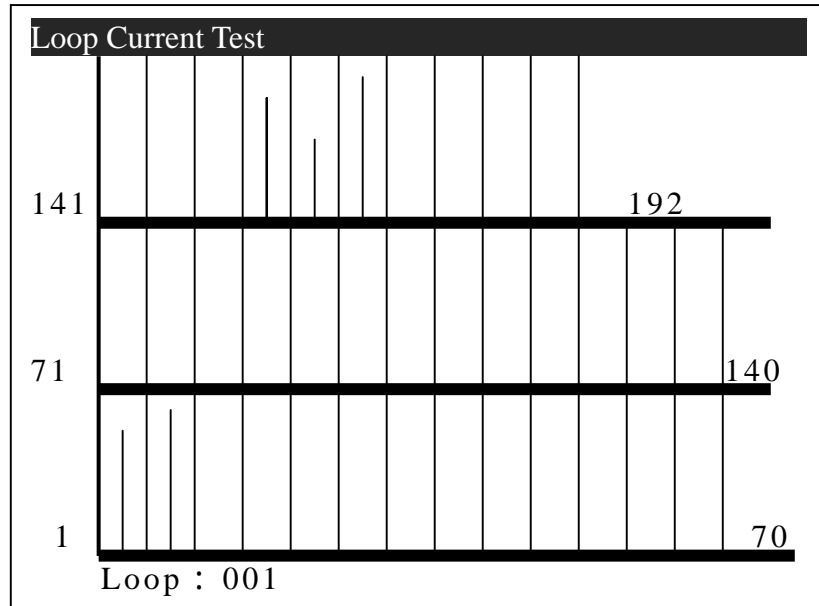
Picture 11

24V Voltage Test: Testing the Bus wire 12V Voltage to each single device. Orders in this menu are almost the same as in 12V Voltage Test except for the deference that this order tests the high voltage range between the 2 terminals of the pulse signal.

Loop Current Test: This order tests the working current of all the equipments in a certain loop and shows them on the LCD display in a curve graph way. See picture 12. As the picture shows, the 192 points are in 3 parts and each part is divided into several grids with 5 points in a grid. The 3 parts all have there initial address No. as 1, 71, 141 for easy to read. Size of the Current is shown in obvious vertical line and it is an approximate figuring way. If there is no equipment on a point, the current of that point is 0. The vertical line on that point will be a very short line (This is shown with horizontal thickness in picture 12. See the practical status on the LCD display.). In fact, the short line is only a point.

Functions of the keypads on the operation panel in picture 12:

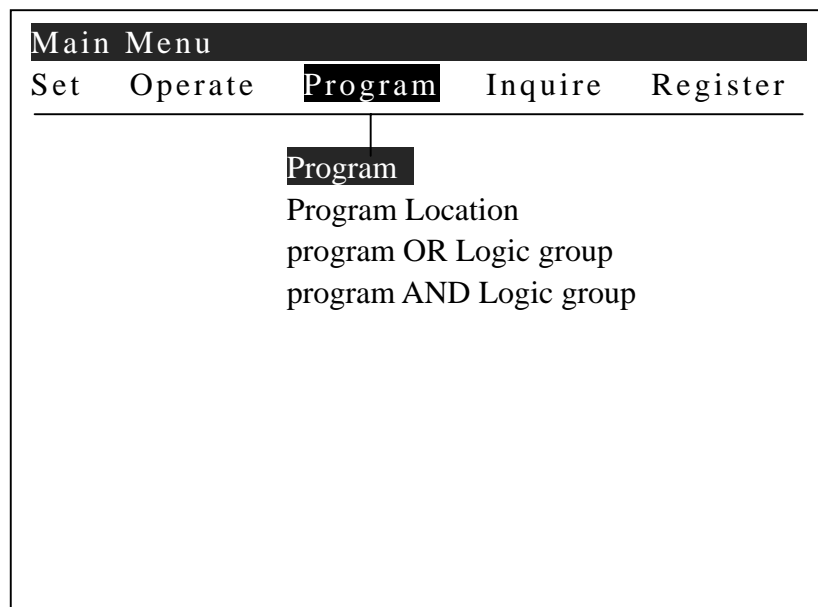
- 【 】 : degression repeatedly of the Loop number
- 【 】 : increase by degrees of the Loop number
- 【 】 : degression repeatedly of the Address number
- 【 】 : increase by degrees of the Address number
- 【ENTER】 : Perform the testing function



Picture 12

(4) Program menu

This control panel can edit the attribute of all the configured point equipments and make the relative settings of them. Editing Options includes Comprehensive Programming, Programming of Installation location, Programming of OR Logic Group, Programming of AND Logic Group. All of these editing functions are performed through Program Menu. Program menu and its Submenus are as the following picture 13 shows. All the Submenu of the main menu has its password and you can only enter into it by given the right password.



Picture 13

1) Submenu Program

Program/Program is the Comprehensive Programming Menu. It can edit attributes of all the configuration point equipments. The editing window is as picture 14 shows. The 2 upper rows are for entering the Loop No. and Address No.. The 7 lower rows are for entering the attributes, including:

Type: Type of the device. There are 32 types of devices corresponding with numbers 1~32. Therein, 1~4 are corresponding with Smoke Detector, Heat Detector, Manual Call point, Interface Module. 5~8 are corresponding with 4 types of Input Module. 9~28 are corresponding with 20 types of Output Module. 29~32 are the user-defined Icons. Each type of the devices has a corresponding Type Icon. See Appendix A for the Type and Icon Contrast.

OR Logic Group: OR Logic Group No. This control panel can set 511 Linkage OR Logic Groups. Each OR Logic Group contains at most 32 Output Module Address No.. OR Logic Group are numbered in order from 1 to 511 and each of them can be connected with point device of Input Type to achieve the linkage function. This attribute connects the equipment of the current Address with a certain OR Logic Group (depending on the entered OR Logic Group No.) so when the device alarms, the intelligent linkage function works and all the related Output modules in the OR Logic Group will be activated.

AND Logic Group: AND Logic Group No.. This control panel can set 511 Linkage AND Logic Groups. Each AND Logic Group contains at most 32 Output Module Address No.. AND Logic Group are numbered in order from 1 to 511 and each of them can be connected with point device of Input Type to achieve the linkage function. In this attribute, 2 point equipments are connected with a certain AND Logic Group while in fact they are corresponding with Terms "A" and "B" respectively. When these 2 devices alarm, the intelligent linkage function works and all the related Output modules in the AND Logic Group will be activated. This attribute connects the current point device with a certain AND Logic Group (depending on the entered AND Logic Group No.) and set Terms "A" and "B" at the same time. Clearly, alarm of 1 device can not activate the Output module in the AND Logic Group. Only when 2 devices alarm and they are connected to the same AND Logic Group which are set to be Term "A" and "B", in this way, they can activate the AND Logic Group Linkage.

Example:

Loop 01 Address 001 is a Smoke Detector (device of Input Type), the AND Logic of it is 001A.

Loop 01 Address 002 is a Manual Call Point (device of Input Type), the AND Logic of it is 001B.

When both them alarm, if the intelligent linkage function works at this time, all the Output modules in the 001 AND Logic will be activated.

Floor Number: number of floors. Enter the floor number of the building in which device of the current address located.

RAUN: No. of Remote Annunciator (Fire Indicating Panel). Enter the No of fire

indicating panel which can show the local fault and alarm information. When there is fault or fire alarm at that site, it will sent message to and shows on the fire indicating panel.

RALN: Display unit No. on the Fire Indicating Panel. 1 single device can have an exclusive No. on a certain fire indicating panel for showing the fault or fire alarm happened on that site.

Location Code: Code of installing location. Enter a 4-number Location code of which the range is 1~1535. When the 4th number is entered, the corresponding installing location description of will be displayed at the last line of the LCD screen. The attribute information above will be saved in the Flash memory of the control panel once confirmed.

Key functions Operation window in picture 14:

Direction keys and Number keys: move the cursor and enter the numbers.

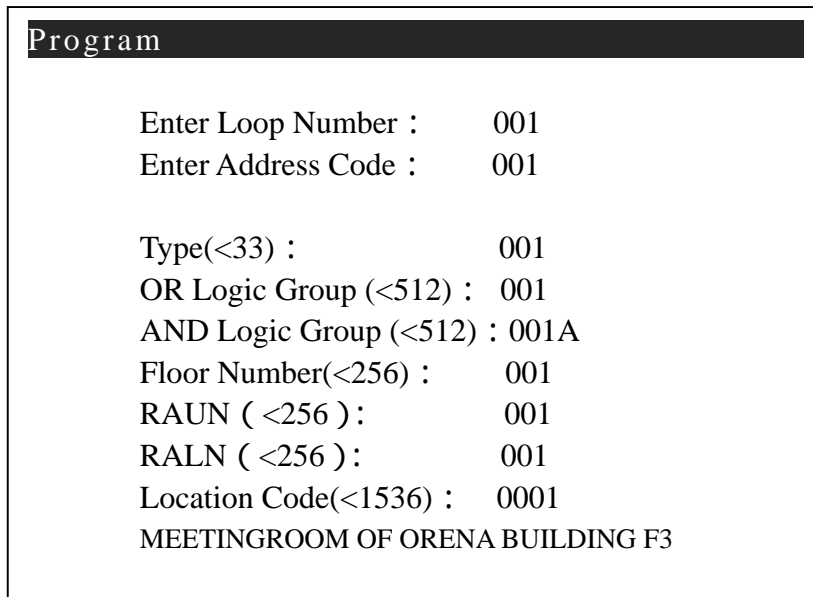
【ENTER】 : Function of **【ENTER】** is different as in the different situation. If it is in the Loop No.& Address No. Bar, pressing **【ENTER】** will start checking whether the Address No. and the Loop No. are valid and if the Address is existed in single device connected with this control panel. If the Address No. is valid and existed, all the attributes of the current Address will be displayed in Attribute area and at the same time the cursor will move to Attribute-Editing area for modifying the attributes. Otherwise, the cursor will not move and the system shows “None”. If the cursor is in the Attribute-Editing area, pressing **【ENTER】** will start checking whether all the entered data is valid. If data is valid, they will be saved. If data is invalid, the system will not save them and shows “Fail”.

Notice: After data is successfully saved, the cursor will stay in the Attribute-Editing area and the Address No. will be “Plus 1” automatically for convenient attribute-editing of the next single device.

【*】 : Address No.+1. If the cursor is in the Attribute-Editing area, press **【*】** then the cursor will move to the Address No. bar.

【#】Address No.-1. If the cursor is in the Attribute-Editing area, press**【#】**then the cursor will move to the Address No. bar.

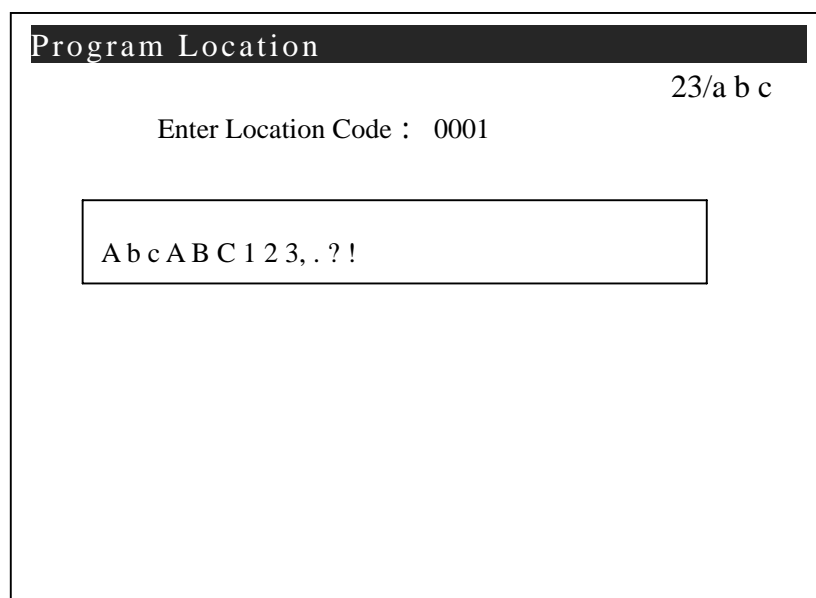
【F1】 Only when the cursor is in the Attribute-Editing area, this key is valid. Pressing **【F1】** can switch between Term “A” and “B” of AND Logic Group.



Picture 14

2) Submenu Program location

Program/Program Location is the Installing Location Editing menu. This control panel can store 1535 items of installing location information and each information hold 36 ASCII characters. This menu provides entering and saving of the Installing Location information. All information are in English and provide English capital letters or lowercase letters, numbers, punctuation marks, etc. The entering window is as picture 15 shows. The first line is for entering the No. of Installing Location Information and its range is 1~1535. The second line is for entering description of the Installing Location information. The key functions are as the following:



Picture 15

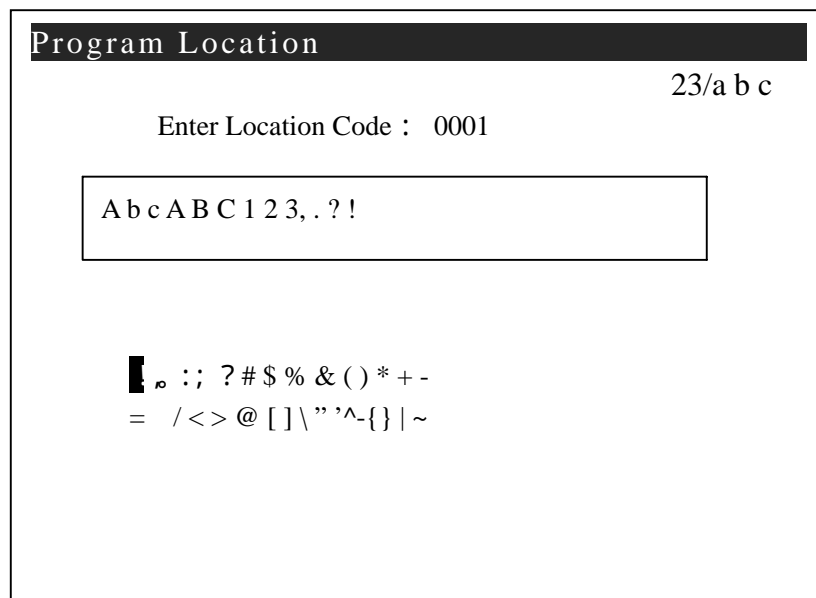
【←】 , 【→】 : moving left or right in the first and second line.

【↑】 : Moving the cursor from the second line to first line and switching from

information of entering location to No. of entering location.

Numbers: Enter numbers at 1st line, select to enter numbers, capital letters and punctuation marks or lowercase letters, punctuation marks at 2nd line. Numbers are entered directly. Capital, lowercase letters and punctuation marks are entered by pressing the key for 1 time or pressing the key several times successively and frequently.

【*】: When the cursor lies in the first line(for entering the installing location No.), press this key will make the Installing location “plus 1”. When the cursor lies in the second line(for entering the installing location information), press this key then the other characters for entering will be displayed in the subsidiary bar as picture 16 shows. Now you can select the characters displayed into the current location of the cursor.



Picture16

【#】 When the cursor lies in the first line (for entering the installing location No.), pressing this key will make the Installing location “Minus 1”. When the cursor lies in the second line(for entering the installing location information), pressing this key can make switch between numbers, capital letters and punctuation marks, lowercase letters and punctuation marks. The switch result is shown on the up-right angle of the LCD screen. “abc” stand for the current entering character is lowercase letter and punctuation mark and “ABC” stand for the current entering character is capital letter and punctuation mark. “123” stand for the current entering character is number.

【F1】 : pressing this key when entering installing location information can clear 1 character before the cursor. It is the backspace key.

【Enter】 : pressing this key when the cursor is in the first line(for entering the installing location No.) can show the current No. of installing location and the cursor will move the Installing location information Line for editing the information. Now press 【Enter】 again will save the entered information.

3) Submenu Program OR Logic Group

Program/Program OR Logic Group is the linkage OR Logic Group Editing menu. It can program the Output module that each of the OR Logic Group need. The editing window is as picture 17 shows. In the picture, enter the OR Logic Group No. at the “Enter Group Number” and the range is 1~511. The system shows “None” if the entered number is out of this range. The area for entering the OR Logic Group No. of a 4-row-8-line single device can accept at most 32 Output module and its format is a successive 5 number. The initial 2 number is the Loop No. and the last 3 number is the Address No. For example, “01001” stand for Address 1 of Loop 1. Notice that the valid Loop number here is 01~08 and the valid Address number is 001~192. The system shows “Fail” if the entered number is out of the valid range and the saved order will not be executed. Key-in the Address in a order of left to right and up to down. “00000” is the signal of End. The entered addresses after “00000” will be neglected.

Program OR Logic Group			
Enter Group Number:001			
01001	01002	01003	01004
00000	00000	00000	00000
00000	00000	00000	00000
00000	00000	00000	00000
00000	00000	00000	00000
00000	00000	00000	00000
00000	00000	00000	00000
00000	00000	00000	00000

Key functions of operation window in picture 17:

Number keys: for entering numbers.

【←】 【→】 : for moving the cursor left and right.

【↑】 【↓】 : for moving the cursor up and down in Address-entering area

【*】 : plus 1 for the OR Logic Group No. and the cursor move to OR Logic Group No. line.

【#】 : Minus 1 for the OR Logic Group No. and the cursor move to OR Logic Group No. line.

【Enter】 :press this key when the cursor is in the OR Logic Group line, the system shows the information of the current OR Logic Group and the cursor move to Address No. line. Now press this key can save the entered data.

【F4】 : In order to speed up the manual editing, this control panel provide a copy and paste function. Press 【F4】 can accomplish this function. The operation method is: when the cursor is at the Address No. line, pressing 【F4】 can copy data of the Address No.(5 numbers) with the cursor to the next Address No. data. The order for copying is from left to right and from up to down. The copying can

be made by 2 methods. If the current Address No. data with cursor is 00000, the copy is original copy. If the current Address No. data with cursor is not 00000, the last 3 numbers of it will be plus 1 and the copy is to be made.

Example: data before copying

01001 00000 02002 01003

05020 03032 02052 01120

If the cursor is behind 01001, press 【F4】 for 7 times, the data will be:

01001 01002 01003 01004

01005 01006 01007 01008

If the cursor is behind 00000, press 【F4】 for 6 times, the data will be:

01001 00000 00000 00000

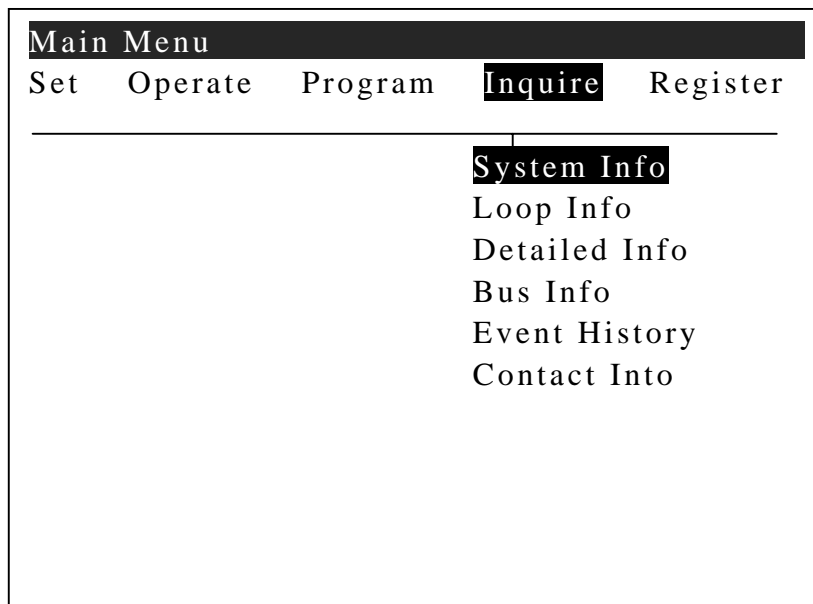
00000 00000 00000 00000

4) Submenu Program AND Logic Group

Program AND Logic Group is the linkage AND Logic Group Editing menu. It can program the Output module for each of the AND Logic Group. The operation window and method is the same as OR Logic Group menu. Please refer to instruction of Program OR Logic Group menu.

(5) Inquire Menu

Inquire is the menu for inquiring various information. It contain 6 Submenus as picture 18 shows. Each of them can display a category of information. See details in the following:



Picture 18

1) Submenu: System Info

Inquire/System Info: can inquire the number of single devices that installed in the system of this control panel and the total number of single devices. The display window is as picture 19 shows:

System Info	
Smoke Detectors:	0001
Heat Detectors:	0001
Manual Call Points:	0001
Interface Modules:	0001
Input Modules:	0001
Output Modules:	0001
Total Number:	0006

Picture 19

2) Submenu: Loop Info

Inquire/Loop Info: can inquire the number of various single devices of a certain Loop and the total single device number of it. The display window is as picture 20 shows. Press the arrow keys to change the Loop No. and view details.

Loop Info	
Loop Number:	01
Smoke Detectors:	001
Heat Detectors:	001
Manual Call Points:	001
Interface Modules:	001
Input Modules:	001
Output Modules:	001
Total Number:	006

Picture 20

3) Submenu: Detailed Info

Inquire/Detailed Info can inquire detailed information of all the single devices installed in a certain Loop, including Address No., facility Type, Current state and description of installing location. The display window is as picture 21 shows. There are 6 items of information in one page and each Loop description need 32 pages to show the whole information. Press 【↑】 and 【↓】 to page up and down. Press 【←】 and 【→】 to switch the displaying Loop.

The display format of the information is:

Line 1: Address No. Facility Type Current State of Facility

Line 2: Description of Installing location

Therein, Facility Type includes No Type, Smoke Detector, Heat Detector, Manual Call Point,

Picture 21

Detailed Info		
Loop Number : 01		0 1 / 3 2
ADD	Type	State
001	Smoke Detector	OK
	MEETINGROOM OF ORENA BUILDING F3	
002	None	None
003	Heat Detector	Fault
	MEETINGROOM OF ORENA BUILDING F3	
004	Heat Detector	Fire
	MEETINGROOM OF ORENA BUILDING F4	
005	Output Module	Start
	MEETINGROOM OF ORENA BUILDING F5	
006	Input Module	OK
	MEETINGROOM OF ORENA BUILDING F5	

Interface Module, Input Module and Output Module, 7 types in all. Current State of Facility include No Installed, Normal, Fault, Fire Alarm, Setup, Feedback, Stop and Isolation, 7 types in all.

4) Submenu: Bus Info

Inquire/Detailed Info can inquire the Bus state of all Loops. This control panel can affix at most 8 loops and the Bus state of each loop can be real-time inquired. The Loop Bus state include No Installed, Normal and Fault, 3 types. There is a BUS FAULT indicator in the front of the control panel. When the indicator lights up, one can inquire the detailed BUS FAULT information from Inquire/Detailed Info.

5) Submenu: Event History

The control panel will record the related events and always save them in case of inquiry. The maximum amount of records is 9999 and they will be saved in the memory in order. The latest events will always be at the top-front. Each time you check the event record, you will see the events that happened backmost first. Events Type include the following:

- “Fire”: Fire Alarm records
- “Start”: Startup records
- “Feedback”: Feedback records
- “Fault”: Fault records
- “Restore-1”: Stop records(Resume of Startup)
- “Restore-2”: Feedback resume records
- “Restore-3”: Fault resume records
- “Power on”: Power up records

- “Reset”: Restoration records
- “Register”: Registration records
- “Program”: Program records
- “Clear PI”: Clearing records of Program
- “Isolation”: Isolation records
- “Rel.Iso”: Release records of Isolation

Display window of Records information is as picture 22 shows. There are 14 items of information in one page. Press the direction keys to page up and down. Information display format is as the following:

No. Date Time Event type [Loop No. Address No.]

Example: 0050 02-02-2007 11:59 Fault 01.005

The above information stand for: The single device of Loop 01 Address 005 sent Fault alarm at 11:59 of February 2nd, 2007.

Event History					
0001	0 5-1 0-2007	1 2 : 20	Power on		
0002	0 5-1 0-2007	1 1 : 2 9	Fault		01.004
0003	0 5-1 0-2007	1 1 : 2 8	Fault		01.005
0004	0 5-1 0-2007	1 1 : 2 7	Fire		01.014
0005	0 5-1 0-2007	1 1 : 2 6	Fault		01.122
0006	0 5-1 0-2007	1 1 : 2 0	Fault		01.192
0007	0 5-1 0-2007	1 1 : 1 8	Reset		
0008	0 5-1 0-2007	1 1 : 1 5	Power on		
END					

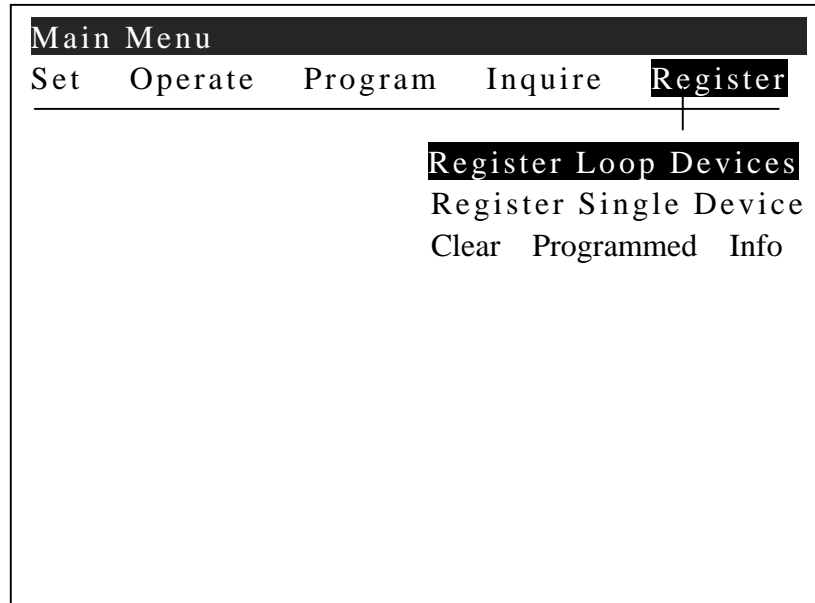
Picture 22

6) Submenu: Contact Info

Inquiry/Contact Info can provide inquiry of the Contact of our company and the Version No. and the last modification time of the software.

(6) Register Menu

Register menu include 3 Submenus as picture 23 shows, used for recording of all the single devices in a loop, recording of a certain single device (the changed Address No.) and clearing of all the programming information. Select menu and enter the password to get into the related operation window.



Picture 23

1) Submenu: Register Loop Device

All the loops must be registered before performance of its function. And recording is set for Loops which mean to incorporate all the single devices installed in a certain Loop into System of this control panel by method of communication. Meanwhile, information of Statistical Device Type and Amount of Device will be saved in Flash Memory of this control panel. The un-registered single devices is outlying with System of this control panel. The Registration operation window is as picture 24 shows. Press **↑**, **↓** to select the Loop No. that need registration. The screen shows “Initializing, Please Wait...” after your confirmation to start registration. The time of registration is direct proportion with the single device amount installed in the Loop, ranging from 1 minute to 5 minutes. If registration is about an un-existed Loop, the LCD screen shows “Fail”. When the registration is finished, the LCD screen shows the total amount of single device in this registration as picture 25 shows. Several seconds when a registration is finished, the System will perform a reset automatically.

2) Submenu: Register Single Device

Register/ Register Single Device Menu can complete the registration of a single device in the System of this control panel and meanwhile provide a required Address No. for the single device. Also it can delete a single device of the previous Address No. from the Loop. The operation window is as picture 26 shows. Functions of the keys are as the following:

Register Loop Devices

Enter Loop Number: 01

Picture 24

Register Loop Devices

Enter Loop Number: 01

Initializing,Please Wait...

The registration has completed.
The registered amount is 192

Picture 25

Register SingleDevice

Enter Loop Number: 01

Enter ID NO. : 1000ABDF

Enter Address Code: 001

Picture 26

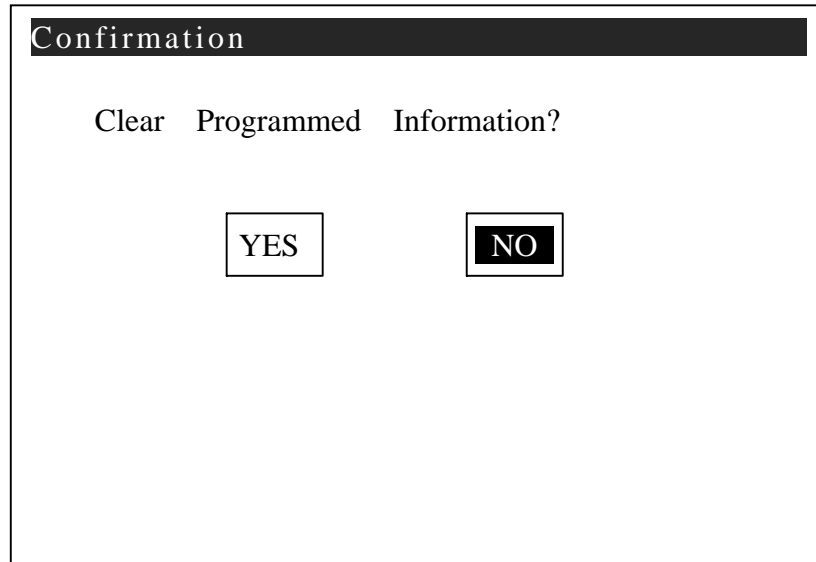
Number Keys: enter Loop No. at first line, enter Address No. at the second line.

Direction Keys: move the cursor up and down, left to right.

The second line is for entering the ID code. ID code is the Identification No. binding with the single device and each single device has a given ID code and will not be changed permanently. Id code is a 16 Hexadecimal number with 8 numbers. For example, in 1000ADFE, The frst number is the same with its Device Type and the other numbers will be increasing serial No. Entering method for ID code: press Number keys for numbers from 0 to 9 of the 16 Hexadecimal numbers, press **【*】** , **【#】** for A~F of the 16 Hexadecimal characters (**【*】** is from order of A~F and **【#】** is from order of F~A). Currently, the valid first numbers of ID code are 1,2,3,4,5,9 (or 6). If the number entered is invalid, the System shows “Fail” (The Loop No. and Address No. must be all valid.). If the entered ID code is 00000000, it means that the single device is deleted.

3) Submenu: Clear Programmed Info

Register/Clear Programmed Info menu Clears the information which is edited in the Program menu, including all of the installing location descriptions, all of the AND Logic Group and OR Logic Group, and the information in the Comprehensive Programming except for the Facility Type. To operate this menu means that the system will be re-constructed and one should be cautious about it! Select this menu and press “Enter”, enters the password. The system shows a window as picture 27 if the password is right. Click “YES” to perform the function of this menu.



Picture 27

(7) Reset Function
































Under factory logo screen, pressing **【RESET/ESC】** can execute the reset function. The LCD screen shows “System Reset” to which means that the system is in resetting. Reset function will initials all of the current state except Isolation and Intelligent Linkage.

(8) Manual/Auto Switch

Press 【MANU/AUTO】 can startup or stop the intelligent linkage function. Under factory logo screen or information display screen, pressing 【MANU/AUTO】 and entering the password then clicking “Enter” can change the state of the intelligent linkage. The indicator light up to show that the intelligent linkage function works.

Appendix:

A. Icons of the single device type, name, category

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 Controlling 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 pump	
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	