P-9910B Hand Held Programmer

Installation and Operation Manual

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I General

P-9910B Hand Held Programmer (the programmer) can read the address, sensitivity and device type and program the sensitivity and device type of addressable detectors or modules. The programmer can also program and read address, number of LED and user code of each LED of repeater panels.

II Features

1. Hand held unit, small in size, easy to carry and operate.
2. Able to program addressable detectors, modules, or devices with I^2C interface such as GST8903 graphic repeater panel, I-9105R Intelligent Reflective Beam Detector and C-9105R Conventional Reflective Beam Detector.
3. Quadruple digit alphanumeric LCD display.
4. Low-consumption hibernation and auto-shutting function.
5. Low battery indication.

III Specifications

1. Power: One laminated battery, 9V
2. Operating Current ≤ 8mA
3. Standby Current ≤ 100μ A
4. Operating Environment:
    Temperature: −10℃ ～ +50℃

Relative Humidity$\leqslant$95%,
non condensing.

5. Dimension: 164mm×64mm×24mm
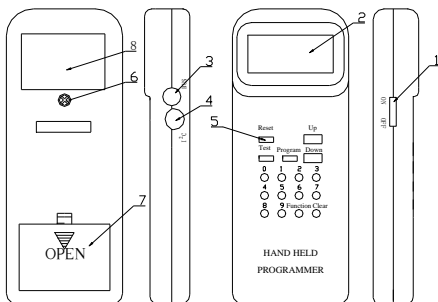
IV Structure

Appearance of the programmer is shown in Fig. 1.

Fig. 1

1: Power Switch
2: LCD
3: Loop Jack
4: Repeater Panel Jack (I^2C)
5: Reset Key
6: Fixing Screw
7: Battery Cover
8: Nameplate

Name and function are as follows:

Power Switch: Turning on and off the programmer.

LCD: Displaying all detector information and information input by operator, and

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indicating low battery.

Loop Jack: Connecting the programmer with addressable detectors or modules.

Repeater Panel Jack (I^2C): Connecting the programmer with GST8903 graphic repeater panel or detectors programmed through I^2C mode.

Reset Key: When the programmer is shut down automatically because of not in use for a long time, press this key to power it up again and enter into operating state.

Fixing Screw: Fixing PCB of the programmer as well as screwing front cover and back cover together.

Battery Container Cover: Putting the battery inside.

Nameplate: Stuck on back of the programmer.

V Operation

1. Initial Installation of Battery

Open the battery container cover according to direction on it, buckle the battery correctly and put it into the container, then close the back cover.

2. Replacement of Battery

If the LCD screen shows an "LB", the battery is under-voltage and

needs to be replaced.
Note:
Before replacing the battery, turn off the programmer. Do not overexert the battery from the buckle.

3. System Wiring

Connecting the programmer with detectors or modules:

Insert one end of the connecting wire into the loop jack of the programmer ("3" in Fig. 1), grip the other end on the loops of detectors or modules.

Connecting the programmer with repeater panels:

Plug one end of PS/2 connector to I^2C jack of the programmer ("4" in Fig. 1), and the other end to connector socket of repeater panel.

4. Power up

Dial the power switch to "ON", the LCD screen shows "H002" that means the programmer can work properly.

5. Reset after automatic shut-down

When the programmer is shut down for not use in a long time, press *Reset* to power it up again.

VI Troubleshooting

1. Displaying nothing after power-on: Check connection between the buckle and PCB or the battery first. If there is no

problem, internal circuit may be damaged.

2. Non-programming: Check the detector or module requiring programming, loop terminals connection. Whether there is broken circuit or short circuit. If not, internal circuit may be damaged.

VII Application

1. Applying to Detectors and Modules

The programmer can set the address, device type and sensitivity of a detector. It can also set the address, device type and parameter of a module. You can connect the programmer with the loop of a detector or a module, turn on the power, and operate as follows to program the parameter.

(1) Reading

Press *Test*, the LCD screen shows the original address of a detector or a module; Press *Up*, it shows in turn the pulse duration, year, batch number, sensitivity of the detector or parameter of the module, and device type for non-digital detectors or modules. For digital detectors or modules, it displays in turn sensitivity of detector or parameter of module, device type and configuration information: sub-type for

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digital heat detectors. 04 represents fixed temperature detector, and 02 for rate of rise detector. For digital modules, this is shield answering parameter, 40 represents shield answering, and other parameters for no shield answering. For other digital devices, this doesn't represent anything. Press *Clear* to return to power-on state.

If it fails in reading, the screen shows error information "E" that can be cleared by pressing *Clear.*

(2) Programming the address

In power-on state, input the address (1~242) of a detector or a module, press *Program*, the LCD screen will show a "P" , the programming is successful, and an "E" means a failure. Press *Clear* to return to power-on state.

(3) Programming sensitivity of a detector or the parameter of a module

In power-on state, input unlocking password and press *Clear* to unlock. Press *Function*, then press "3", the screen shows "-" at the last digit. Input corresponding sensitivity or parameter and press *Program*, the screen will show a "P", the corresponding sensitivity or parameter is programmed. Press *Clear*

to clear the "P". Input locking password and press *Clear* to return.

Setting parameters of modules in field is shown as follows.

As for I-9300 Addressable Input Module, parameter 4 is used to set normally open, parameter 7 is set in field for normally closed.

I-9301 Addressable Single I/O Module, normally open 4 is defaulted, normally closed 7 or feedback 3 can be set in field.

I-9303 Addressable Dual I/O Module, normally open 4 is defaulted. Parameters shown in Table 1 can be set.

I-9305 Voice Alarm Zone Control Module, feedback 3 is defaulted, which can be modified as normally closed 7or normally open 4.

Factory default of I-9306 Addressable Interface Module is normally closed 7, which can be set as normally open 4 in field.

I-9314 Intelligent Door Lamp can occupy one address or none. When occupying none, define the device type as 20. Its address is the same as that of a detector. If the detector reports an alarm, I-9314 is also activated simultaneously. When occupying one individual address, define device type as 21.

Table 1

Parameter	Input Mode
1	Channel 1 feedback Channel 2 normally open
2	Channel 1 normally open Channel 2 feedback
3	Both channels feedback
4	Both channels normally open (ex-factory)
5	Channel 1 normally closed Channel 2 normally open
6	Channel 1 normally open Channel 2 normally closed
7	Both channels normally
8	Channel 1 feedback Channel 2 normally closed
9	Channel 1 normally closed Channel 2 feedback
Others	Both channels normally open

(4) **Programming device type** (For digital modules, this is to set shield answering parameter).

In power-on state, the method of defining device type is similar to programming sensitivity, but selecting number "4" instead of "3".

Note: In field, only device type of I-9103 Intelligent Rate of Rise and

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Fixed Temperature Heat Detector can be modified. Device type for fixed temperature detector is 04, and that for rate of rise detector is 02.

As for digital modules, parameter 40 is for shield answering. Otherwise it is another working mode.

(5) Module startup (only one module can be started each time)

a. Appling 24V power to the module, connect the programmer to the loop of module, and input unlocking password and press *Clear*.

b. Pressing *Function* and number "7", the screen shows an "H". The module is started when its action LED is lit.

c. After the module started, press any number from "0~7" to make it stop, the screen shows "LL" (and some module's action LED will flash during this process).

d. If clearance is successful, the screen shows a "0", and following operations can be proceeded.

Note: To avoid unauthorized people modifying important data, the programmer is protected by password. Opening password is "456" and locking password is "789".

(6) Error Indication

When it is not able to program information into a detector or a module, the system gives error indication (showing an "E" on the LCD screen).

Press *Clear* to remove this indication and return to power-on state.

2. Applying to Graphic Repeater Panel

Open the cover of GST8903 repeater panel, remove the jumper on Pin X1, connect the I^2C cable (PS/2 cable) with connector XS1 of repeater panel to read and program the address of repeater panel, number of fire LEDs and corresponding user code of each LED.

How to enter and exit repeater panel mode:

In power-on state, press 2, 5, 8 and *Function* to enter the mode of repeater panel, "0" appears on the screen. After finishing relative operations, press 2, 5, 8 and *Function* again to exit.

(1) Reading and programming address
a. Enter repeater panel mode, the screen shows a "0".
b. Pressing *Down*, it displays current address.
c. If the address doesn't need to be modified, press *Clear* to go on with other operations.
d. To modify the address, input one new address from 1 to 64 and press *Program*, the screen will show a "P" if the programming is successful. Press *Clear* to go on with other operations.

(2) Programming user code and corresponding fire indication LEDs

a. Enter repeater panel mode and "0" is shown on the screen.

b. Input the LED number to be programmed and press *Function*, the screen shows "L" and the LED number.

c. There will be two cases

> ➤ If it is initial programming to this LED, press *Function*, the screen appears a "0". Input corresponding user code of this LED (6 digits, the first three represent the device's zone number and the last three represent its device code. Omit the first digit if it's zero. If *Down* is pressed, the screen shows " — " which represents any number for that digit.) and press *Program*, a "P" will appear if the programming is successful. An "E" will appear if it fails.

> ➤ If the LED has been programmed, pressing *Function*, the screen shows "L" of LED number. Press *Function* again, the screen shows "0". Input the new user code (6 digits, the first three represent the device's zone number and the last three represent its code. Omit the first digit if it's zero. If *Down* is pressed, the screen shows "—" which represents any number for that digit.) and press *Program*, a "P" will appear if the programming is successful. An "E" will appear if it

fails.

Note: Under the condition of modifying LED number, if the first input LED number has been programmed, this will replace the original LED number and its user code with the new one. This operation can be used to modify a wrong LED number and user code. A maximum of 100 LEDs can be programmed. If all have been programmed, the screen will show "PPPP".

d. After the programming is successful, the screen shows "L" and next LED number. If it's the same as the new number, go on Step C. If not, press *Clear* to program the new number and user code.

(3) Reading LED Number and User Code

a. Enter repeater panel mode and "0" is show on the screen.

b. Input the LED number requiring reading, and press *Test*, the screen shows an "E" and LED number, if the input number is bigger than total LED number, it displays "H" and LED number.

c. Press *Up*, it displays in turn higher four digits and lower two digits of user code.

d. Press *Test*, it displays from this LED number up, that is, number and user code of next LED, …. Number and user

of the last LED, "H" and total LED number, number and user code of the first LED…

3. Applying to I²C Mode

Open the cover of I-9105R Intelligent Reflective Beam Detector and C-9105R Conventional Reflective Beam Detector, connect the I²C cable (PS/2 cable) with connector socket (XT3 for I-9105R) to read and program the address of repeater panel, number of fire LEDs and corresponding user code of each LED.

Entering and exiting I²C mode:

In power-on state, press "2", "5" "9" and *Function* to enter I²C programming mode, the screen shows a "0". After finishing the operation, press "2", "5", "9" and *Function* again to exit this mode and return to power-on state.

(1) Reading

a. Enter I²C programming mode and the screen shows a "0".

b. Press *Test*, the screen shows the address.

c. Press *Up*, it will display sensitivity and device type in turn.

(2) Programming address, sensitivity and device type

Enter I²C programming mode first, and press address, sensitivity and device type with the same method as programming addressable detectors.

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