GST-DEF 4.1 Defining Software User's Manual Issue

V4.01

CONTENTS

1 Overview 1
2 System Requirement 1
Software 1
3 Tool Running 1
4 User's Guide 1
4.1 Standard Toolbar 1
4.2 Project Management 1
4.3 Panel Setup 2
4.3.1 Add Panel 2
4.3.2 Rename ..... 错误!未定义书签。
4.3.3 Delete Panel 4
4.4 Zones 4
4.4.1 Define zones 4
4.4.2 Set Zone Qty 4
4.4.3 Modify zone 4
4.4.4 To Panel & To PC 4
4.5 Log 5
4.6 Net Group 5
4.7 Define devices 6
4.7.1 Loop Definition 6
4.7.1.1 Add or Delete Loop 6
4.7.1.2 Define Loop Device 7
4.7.2 Upload and Download 8
4.7.3 Modify Device Definition 8
4.8 Define ZCP 9
4.8.1 General 9
4.8.2 Upload and Download 10
4.9 Define Equations 11
4.9.1 General 11
4.9.2 Define a new equation 11
4.9.3 Delete an equation 12
4.9.4 Modify an equation 12
4.9.5 Upload and Download an Equation 12
4.9.6 Copy an Equation 13
4.10 Repeater 13
4.10.1 Define Repeater 13
4.10.2 Upload and Download 14
4.11 CodeChk 14
4.12 Device Model 14
4.13 Device Type 15
4.14 Export EXCEL 16
4.15 Simulator 17

5 Caution 18
Limited Warranty 18
Product warnings and disclaimers 19

1 Overview

The Defining Tool software is designed with friendly user interface and powerful functions. Fire alarm control panels (FACP) can use this software to define loop devices, ZCPs, and C&E equiations etc. Those definitions should be then uploaded to the tool to simplify commissioning of the fire engineering. It is easy for commissioners to define and diagnose. The main features of this highly intelligent package are:

- ✧ Defining FACPs in the system
- ✧ Defining loops of FACPs
- ✧ Defining C&E equations of control panels
- ✧ Defining ZCP (zone indication and manual intervention control panel)
- ✧ Defining net node.
- ✧ Defining fire detection zone.
- ✧ Grouping FACPs
- ✧ Supporting multi TCP/IPv4 protocol.

2 System Requirement

Software

Windows7, Windows8 and Windows10 English operating system.

3 Tool Running

As the defining tool is a green software, it can run just by finding and clicking GST-DEF 4.1 Defining Software.

4 User's Guide

4.1 Standard Toolbar

The toolbar is shown in Fig. 1, including items such as Project Management, To Panel, To PC, Back, CodeChk, Device Model, Device Type, Export Excel, Export db, Simulator, Language Set, NetMode Set and About. You can reach the relevant window to operate or define by clicking the corresponding button.

Fig. 1

4.2 Project Management

Using this tool for the first time, a new project needs establishing. Clicking drop-down list of

in the toolbar, the menu will pop up as shown in Fig. 2.

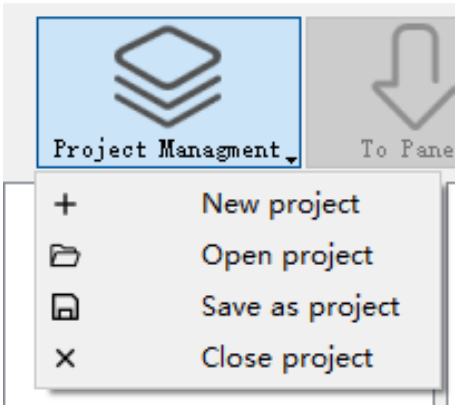


Fig. 2

New project： A new project can be established and defined by clicking <New Project>. Refer to Fig. 3.

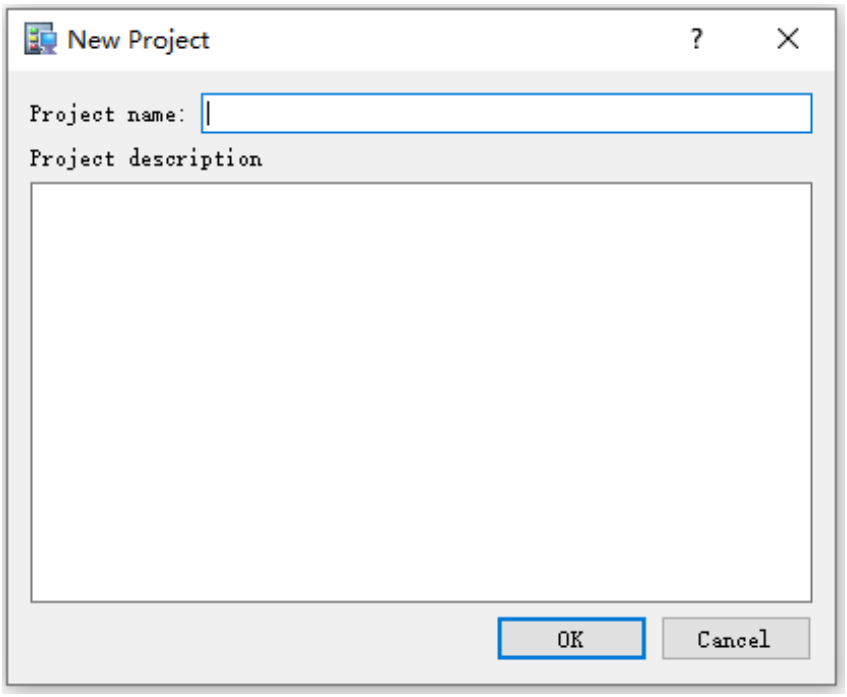


Fig.3

Open project： Clicking <Open Project>, a dialogue box will be popped up for you to choose an existing project.

Save as project： A dialogue box will be popped up for you to save the project to a file by clicking this option. The project can be opened in that file later.

Close Project： The project can be closed in the current screen by clicking this option.

4.3 Panel Setup

4.3.1 Add Panel

Right-click on a project name, choose <Add Panel> to pop up a dialogue box as shown in Fig.4.

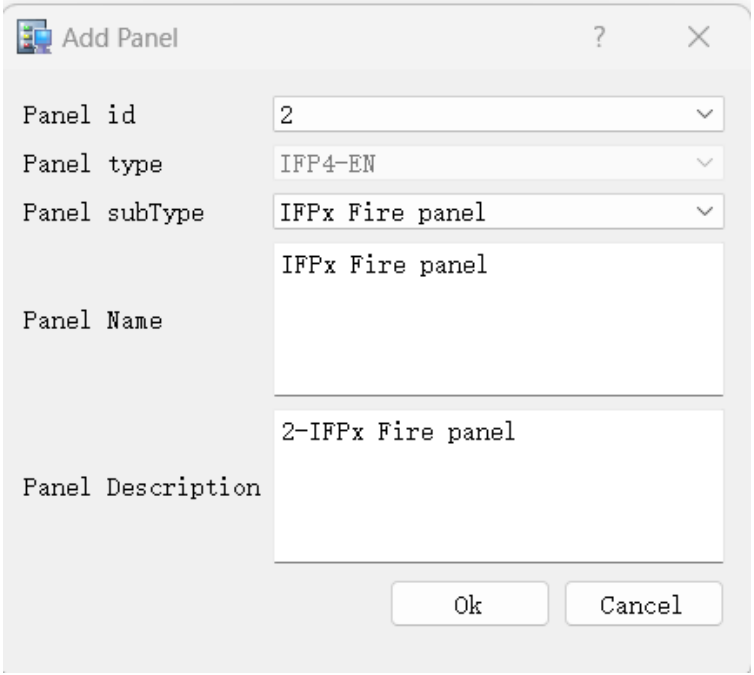


Fig. 4

- ✧ **Panel id:** The Panel id must be unique for each control panel.
- ✧ **Panel type：** It includes IFP4-EN, GST200 and IFP8 panel, can not modify.
- ✧ **Panel subType:** It includes IFPx, Repeater, GST200 and IFP8 panel. Notably, Repeater (Annunciator) panel hasn't loops, ZCP and C&E equations.
- ✧ **Panel name：** Fill the name of the Panel
- ✧ **Panel Description：** Fill the description of the Panel

4.3.2 Edit Panel

Right click a designated FACP, select <Edit Panel> as shown in Fig. 5 to edit FACP.

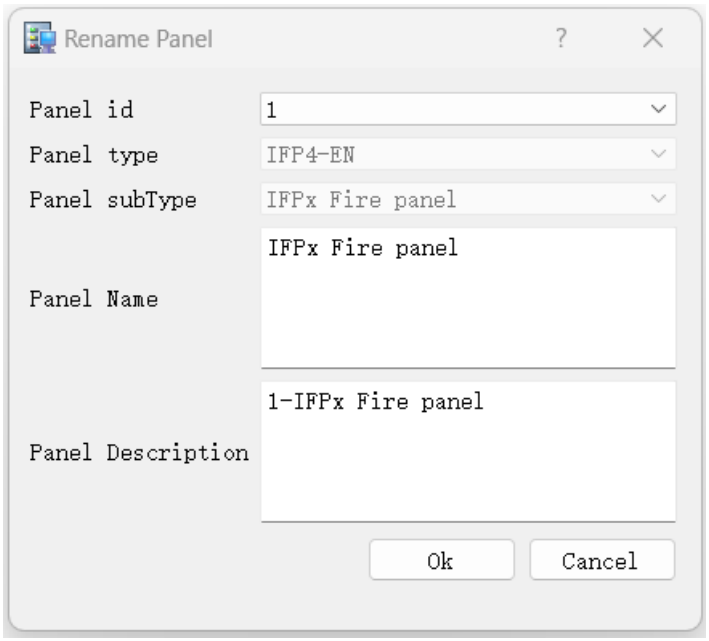


Fig. 5

4.3.3 Delete Panel

Right-click the name of the panel, select <Delete Panel>, all configurations with this panel will be deleted permanently.

4.4 Zones

4.4.1 Define zones

The protected area can be divided into several zones, which, in case of emergency situation in a zone, a general location information can be shown on the FACP to give people the “First Aid”. The zones should be divided according to building structure. A major consideration is to make people easily access the area.

4.4.2 Set Zone Qty

Clicking <Set Zone Qty> can add or delete a zone as shown in Fig. 6.

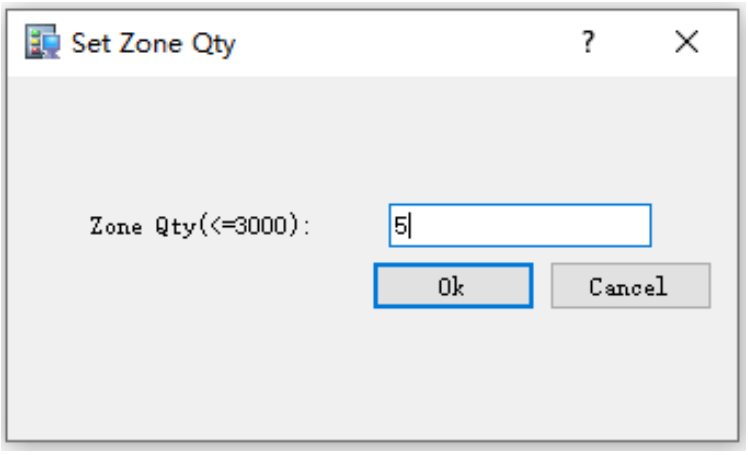


Fig. 6

4.4.3 Modify zone

Zone information can be modified by batch.

4.4.4 To Panel & To PC

By using

, download and upload will be done to all zones.

Select one or several zones and press

separately, the related operation is done to the selected zone(s).

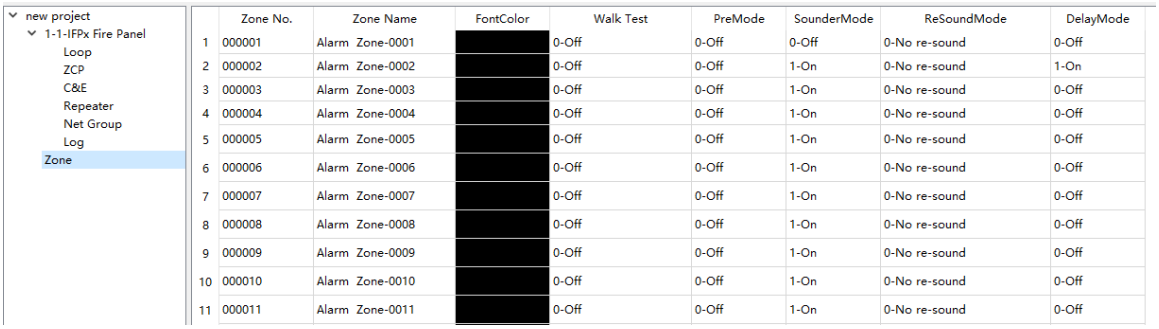
To Panel: it means sending zone information from a computer to a panel.

To PC: it means taking zone information from a panel to a computer.

Clicking <Zone> on the left in Fig. 7 can upload or download all information of zones.

Selecting one or more zones as shown in Fig. 7, click <To Panel> or <To PC>

to complete uploading or downloading of zones.



	Zone No.	Zone Name	FontColor	Walk Test	PreMode	SounderMode	ReSoundMode	DelayMode
1	000001	Alarm Zone-0001		0-Off	0-Off	0-Off	0-No re-sound	0-Off
2	000002	Alarm Zone-0002		0-Off	0-Off	1-On	0-No re-sound	1-On
3	000003	Alarm Zone-0003		0-Off	0-Off	1-On	0-No re-sound	0-Off
4	000004	Alarm Zone-0004		0-Off	0-Off	1-On	0-No re-sound	0-Off
5	000005	Alarm Zone-0005		0-Off	0-Off	1-On	0-No re-sound	0-Off
6	000006	Alarm Zone-0006		0-Off	0-Off	1-On	0-No re-sound	0-Off
7	000007	Alarm Zone-0007		0-Off	0-Off	1-On	0-No re-sound	0-Off
8	000008	Alarm Zone-0008		0-Off	0-Off	1-On	0-No re-sound	0-Off
9	000009	Alarm Zone-0009		0-Off	0-Off	1-On	0-No re-sound	0-Off
10	000010	Alarm Zone-0010		0-Off	0-Off	1-On	0-No re-sound	0-Off
11	000011	Alarm Zone-0011		0-Off	0-Off	1-On	0-No re-sound	0-Off

Fig. 7

4.5 Log

Clicking <Log> on the left in Fig. 8. The Log table pops up for showing the list of panel log.

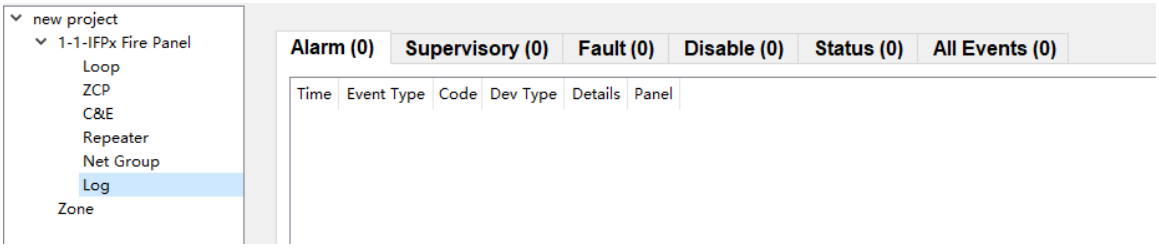


Fig. 8

By using

, can upload group information from the control panel to the computer.

4.6 Net Group

Clicking <Net Group> on the left in Fig. 9. The net group table pops up for showing the list of panel group.

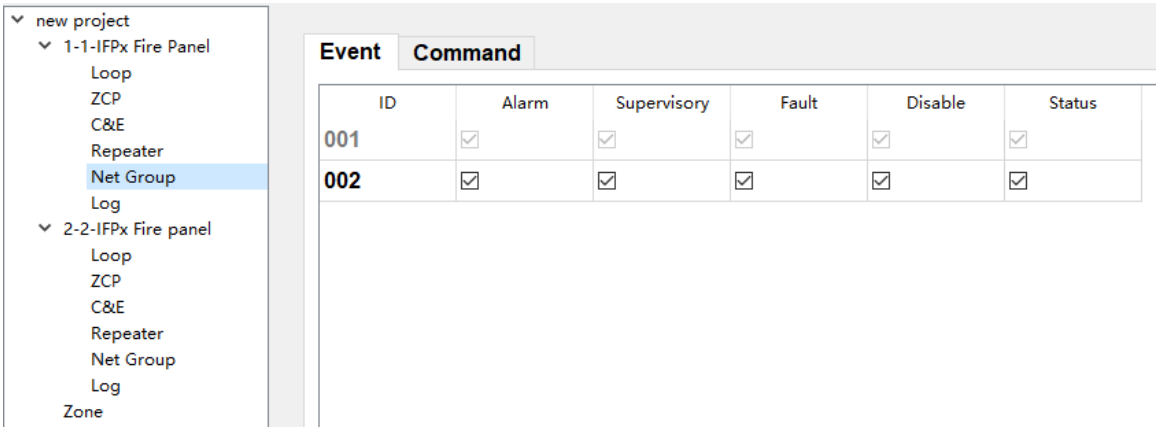
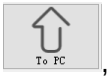


Fig. 9

By using

, can download group information from the computer to the control panel.

By using 

, can upload group information from the control panel to the computer.

4.7 Define devices

4.7.1 Loop Definition

4.7.1.1 Add or Delete Loop

Clicking a control panel on the left, and the screen including Loop, ZCP, Network Card and Cause&Effect Matrix pops up. Refer to Fig. 10.

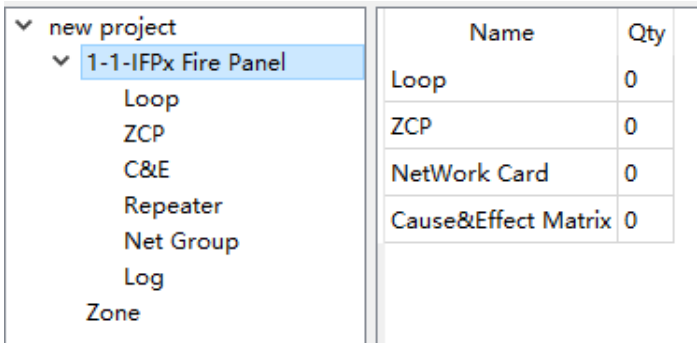


Fig. 10

Clicking Loop on the left, the screen as shown in Fig. 11 pops up. L1/L2, L3/L4 can be used for single or double loop. L5/L6 can be used for single, double, network card, modbus card, DACR card, optical fiber, hyper network, hyper modbus or hyper fiber. S1/S2 can be used for modbus card, DACR card, optical fiber, hyper network, hyper modbus or hyper fiber.

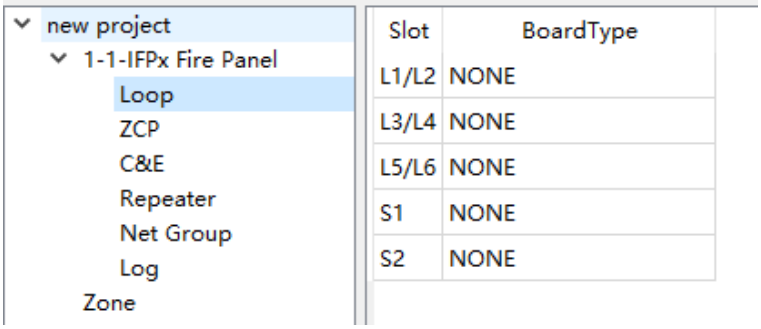


Fig. 11

Choosing <Loop> on the left can modify the type of the loop (such as a single loop or double loop). The loop number on the left changes according to the loop added on the right. Refer to Fig. 12.

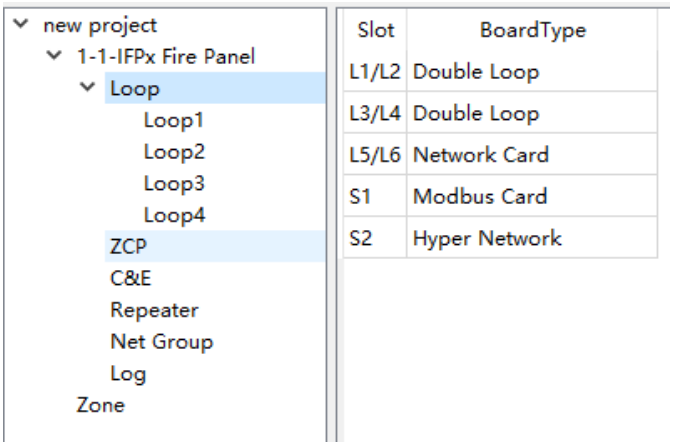


Fig. 12

4.7.1.2 Define Loop Device

Clicking a certain loop, the screen is shown in Fig. 13.

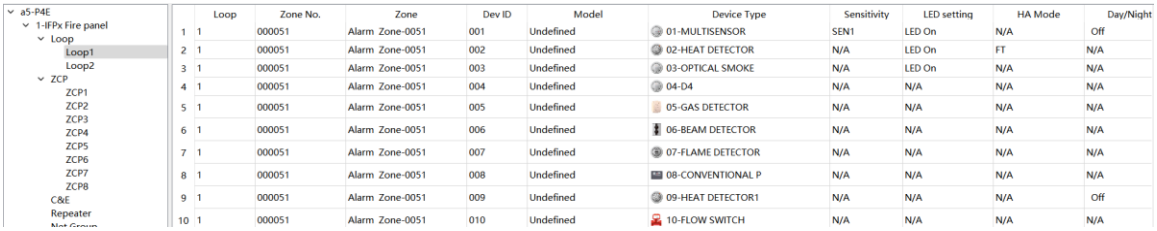


Fig. 13

The items include:

<Loop>: Showing the loop number of the devices.

<Zone No.>: Drop down list to select zone number.

<Zone>: Name of zone.

<Dev ID>: The device ID of the zone.

<Model>: model of device can be chosen through drop down list. For example, model as shown in Fig.14. Different Model have different device type that can be chosen through drop down list. For example, device type of I-9403 as shown in Fig.14.

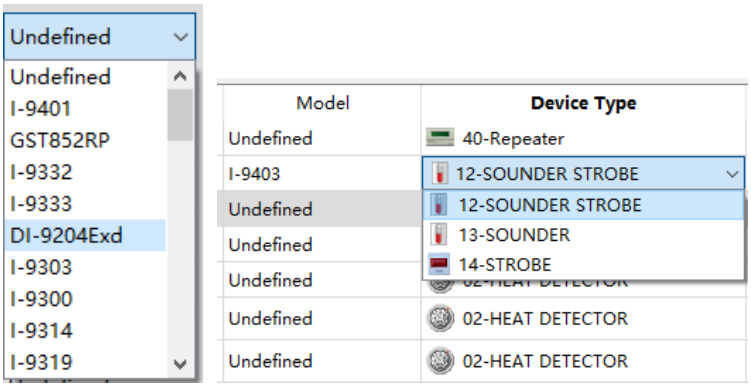


Fig. 14

<Device Type>: Select device type by dropdown list. For detectors or MCP, this type should be selected according to the real device type. For modules, the type is decided by equipment connecting to the module.

<Sensitivity>:sensitivity of the Device type, different devices have different sensitivity that can be chosen through drop down list. For example, sensitivity of MULTISENSOR as shown in Fig.15.

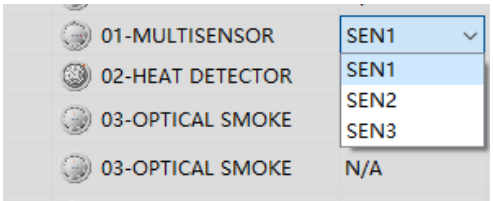


Fig. 15

<LED setting> LED setting of the Device type, different devices have different properties that can be chosen through drop down list. For example, LED setting of MULTISENSOR means <LED Off> as shown in Fig.16.

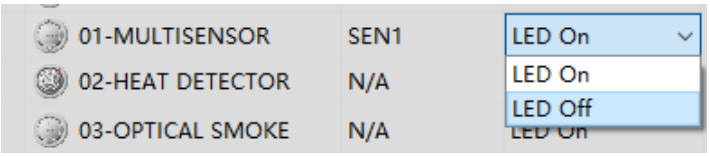


Fig. 16

LED Normal: Polling LED is normal.

LED Off: Polling LED is off.

<HA Mode> HA Mode of the Device type, different devices have different properties that can be chosen through drop down list. For example, HA Mode of HEAT DETECTOR means <FT> as shown in Fig.17.

Fig. 17

<Day/Night>: Is Day/Night mode on?

<Description>: Description.

<Online>: Online or offline of devices can be selected. When offline is selected, the line of device becomes grey. Refer to Fig. 18.

Loop	Zone	Dev ID	Model	Device Type	Sensitivity	LED setting	HA Mode	Day/Night	Description	Online
1	Undefined	001	Undefined	05-GAS DETECTOR	N/A	N/A	N/A	N/A		Online
1	Undefined	001	Undefined	03-OPTICAL SMOKE	N/A	LED On	N/A	N/A		Online
1	Undefined	001	Undefined	03-OPTICAL SMOKE	N/A	LED On	N/A	N/A		Offline
1	Undefined	001	Undefined	01-MULTISENSOR	SEN1	LED On	N/A	Off		Online
1	Undefined	001	Undefined	02-HEAT DETECTOR	N/A	LED On	FT	N/A		Online
1	Undefined	001	Undefined	03-OPTICAL SMOKE	N/A	LED On	N/A	N/A		Online
1	Undefined	001	Undefined	03-OPTICAL SMOKE	N/A	LED On	N/A	N/A		Online

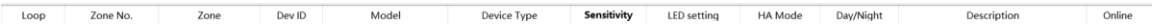
Fig. 18

4.7.2 Upload and Download

Same as for zones, the upload or download can be done to one or a group of or all the devices in the current loop.

4.7.3 Modify Device Definition

A device or a batch of devices can be modified. Data is saved as devices are modified. Except Loop and Address, others can be modified in batches.



- Modify Zone in Batches：Double clicking a selected Zone No. pops up a drop down list to choose Zones to be modified. All selected zones will be modified.
- Modify Dev Id in Batches：Operation is the same as that of Zone.
- Modify Model in Batches：Operation is the same as that of Zone.
- Modify Device Type in Batches：Operation is the same as that of Zone.
- Modify Sensitivity in Batches：Operation is the same as that of Zone.
- Modify LED setting in Batches：Operation is the same as that of Zone.
- Modify HA Mode in Batches：Operation is the same as that of Zone.
- Modify Day/Night in Batches：Operation is the same as that of Zone.
- Modify Description in Batches：Operation is the same as that of Dev Id.
- Modify Online in Batches：Operation is the same as that of Zone.

4.8 Define ZCP

4.8.1 General

As in Fig. 19, the ZCP can be added or reduced. The ZCP is shown in graphic. On the left, there are Button and on the right are KED. Refer to Fig. 20.

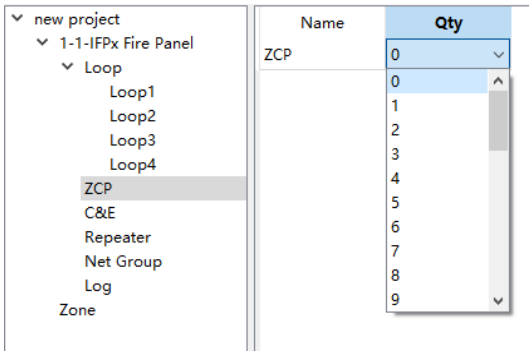


Fig. 19

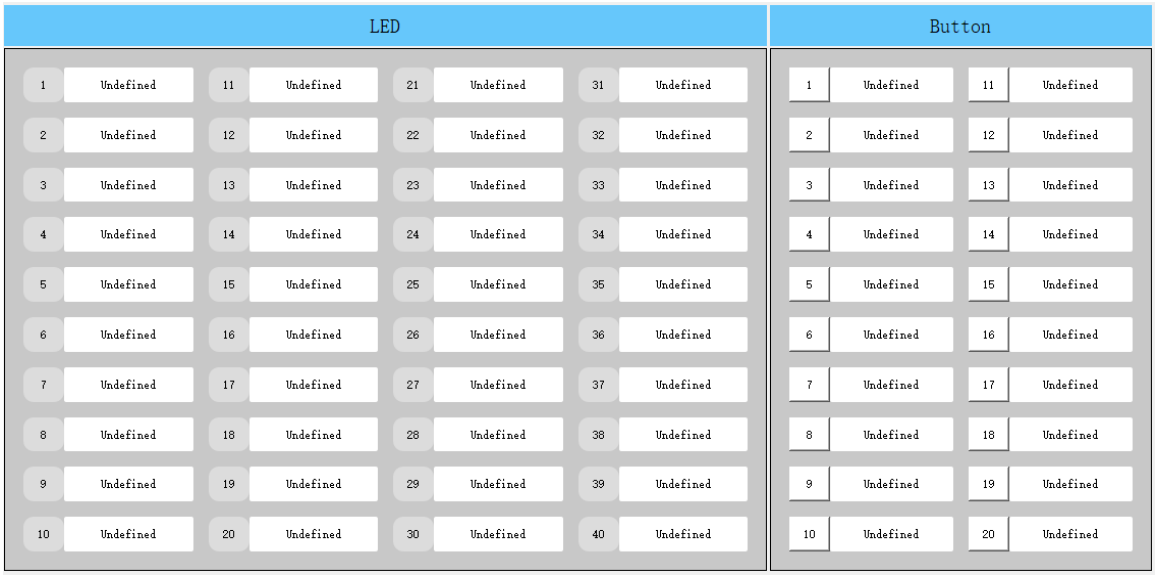


Fig. 20

Define LED: Clicking a LED needed to define on the right, LED definition screen is shown as in Fig. 21.

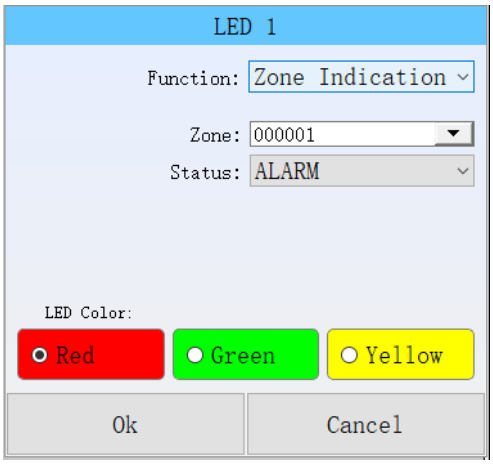


Fig. 21

- Function：including Undefine、Status、Zone Indication、 Key Action；

- Device Type：it can be shown under Status and Key Action. Choose the related device type accordingly as shown in Fig.22.

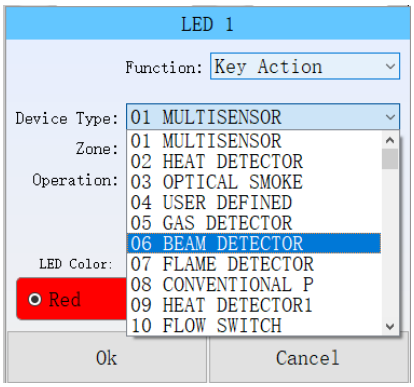


Fig. 22

- Zone is shown under the options of Status, Zone Indication and Key Action in Function. Here can set a zone for devices.

- Index is shown under the options of Status and Key Action in Function. Here can set a zonal number for devices.

- Status：it is shown under the options of Status and Zone Indication in Function. Users can choose by requirements.

- Operation：it is for ZCP, only shown under the Key Action. Users can choose Start/Stop, Disable/Enable by requirements.

- LED Color：Users can freely choose colours of LEDs.

Define Button: Clicking a key needed to define on the left, definition screen for key is shown as in Fig. 23. The operation is similar to that of LED.

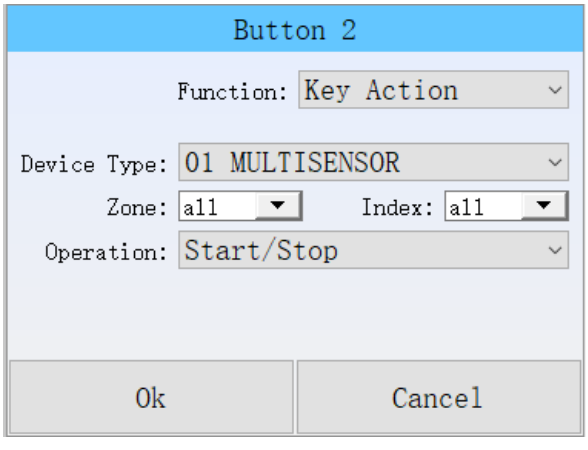


Fig. 23

4.8.2 Upload and Download

Same as for loops, the uploading or downloading of ZCP definitions can be done to one or a group of or all the devices in the current loop.

4.9 Define Equations

4.9.1 General

Clicking <C&E> on the left in Fig. 24, the C&E Matrix as shown in Fig. 24.

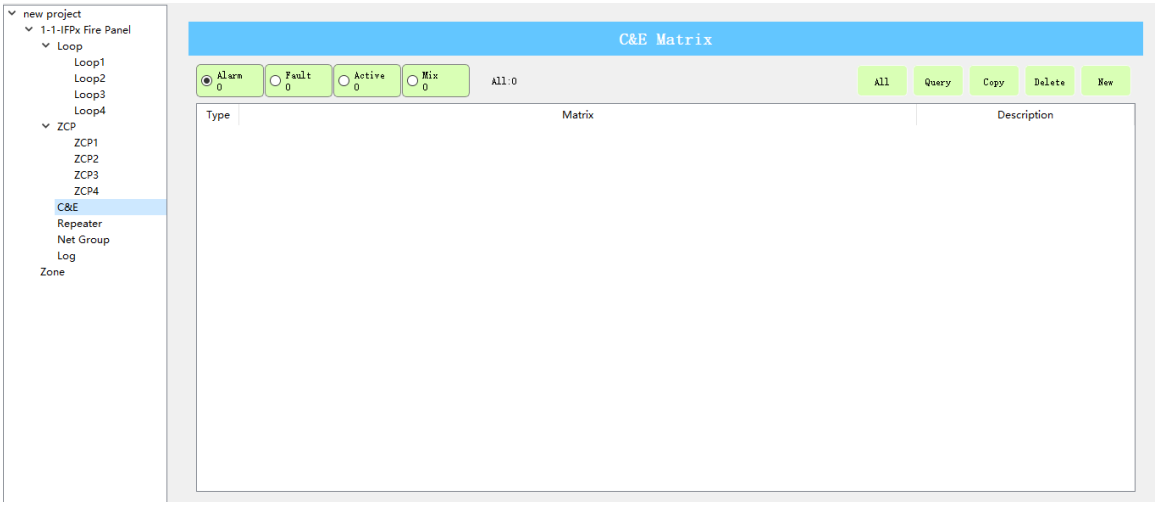


Fig. 24

<Alarm>: Alarm type.

<Trouble>: Fault type.

<Action>: Action type.

<Mix>: Combination type

<All>: Browse all C&E equations.

<Query>: Query some C&E equations follow the action in Fig.25.

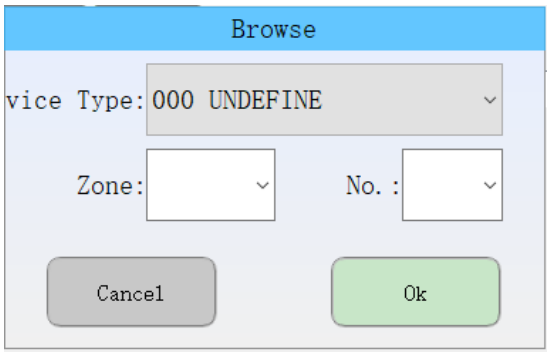


Fig. 25

<Copy>: Copy C&E equations.

<Delete>: Delete the selected equation.

<New>: Add a new equation.

4.9.2 Define a new equation

The screen as shown in Fig. 26 pops up by clicking <New>. Drag a device icon and then define it on the blank.

In Fig. 26, the left of the triangle is the input of a cause & effect matrix (conditions). The right of the triangle is the output of a cause & effect matrix (results). In the conditions, a heat detector and a manual call point are connected in parallel. So any of them detecting an alarm can activate the right device to give alarm sound.

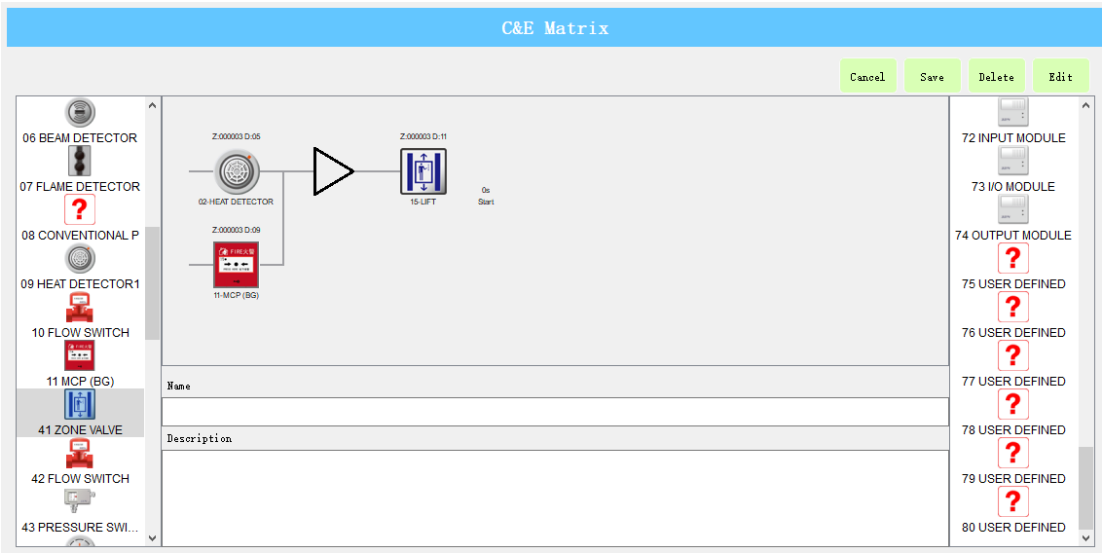


Fig. 26

<Cancel >: Cancel to define, and return to the main screen of C&E equation.

<Save>: Save all defined equations.

<Delete >: Delete a device from the condition or result.

<Edit>: Edit a device selected.

<Name>: Name C&E equations.

<Description>: Describe C&E equations.

4.9.3 Delete an equation

In the list of equations, press <Delete> to delete an equation selected.

4.9.4 Modify an equation

An existing equation can be modified directly by double clicking. In modification screen, clicking Edit button on the right upper part, the screen as shown in Fig. 27 will pop up. If some device needs deleting, press <Delete> can delete the selected device.

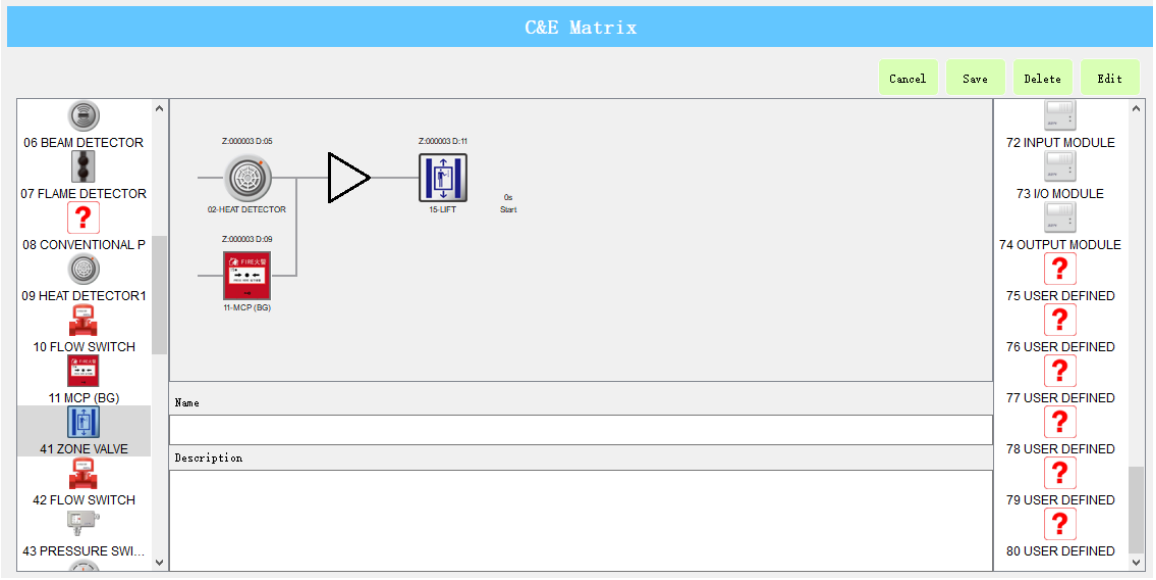


Fig. 27

4.9.5 Upload and Download an Equation

After definitions, equations can be uploaded or downloaded. When uploading, one equation,

many equations or all can be uploaded and downloaded.

4.9.6 Copy an Equation

In C&E equation list, the screen shown in Fig. 28 will pop up by Clicking <Copy> after an equation is chosen to copy.

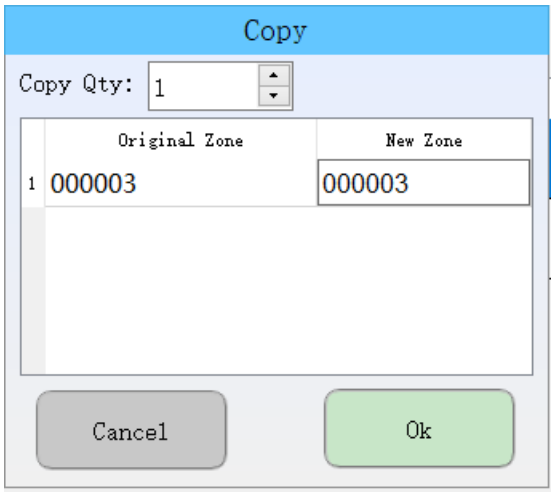


Fig. 28

The screen as shown in Fig. 29 will pop up by clicking <OK> after choosing those needed to copy. In the list, those copied equations can be marked obviously.

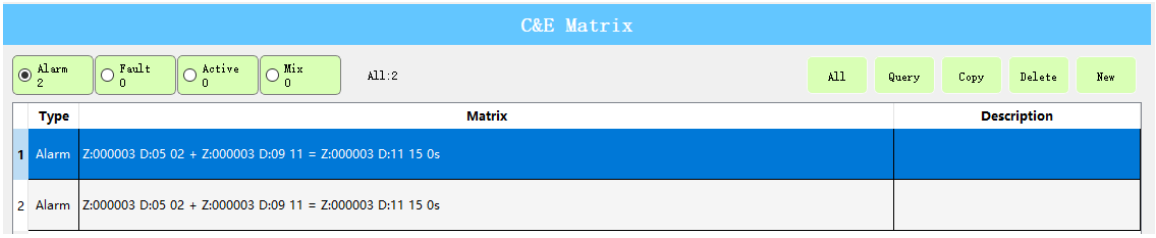


Fig. 29

4.10 Repeater

4.10.1 Define Repeater

Clicking <Repeater>, the screen is shown in Fig. 30.

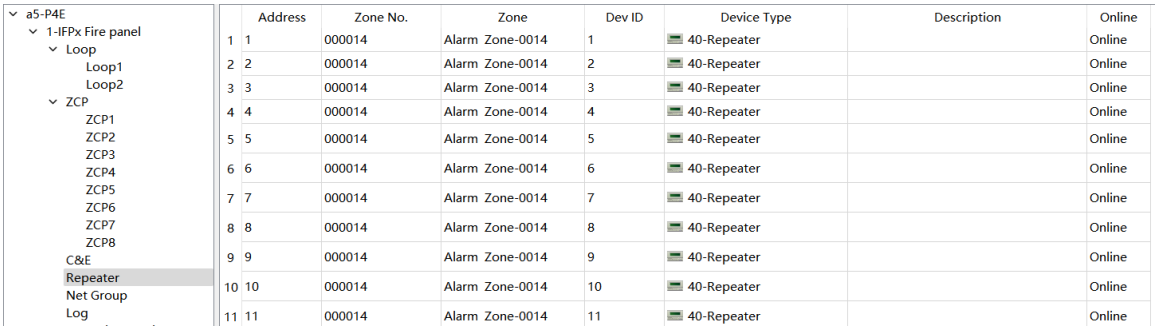


Fig. 30

The items include:

<Address>: The physical address of the devices.

<Zone No.>: Dropdown list to select zone number.

<Zone>: Name of zone.

<Dev ID>: The device ID of the zone.

<Device Type>: Only support 40-Repeater.

<Description>: Description.

<Online>: Online or offline of devices can be selected. When offline is selected, the line of device becomes grey. Refer to Fig. 31.

	Address	Zone No.	Zone	Dev ID	Device Type	Description	Online
1	1		Undefined	0	40-Repeater		Offline
2	2		Undefined	0	40-Repeater		Offline
3	3		Undefined	0	40-Repeater		Offline
4	4		Undefined	0	40-Repeater		Offline
5	5		Undefined	0	40-Repeater		Offline

Fig. 31

4.10.2 Upload and Download

Same as for zones, the upload or download can be done to one or a group of or all the repeater information

4.11 CodeChk

Clicking

the panel can check repeated codes. Refer to Fig. 32.

<Device Number>：coincidental codes. For example, 0000036440, the first 6-digit means zone number and the last four digits means device code.

<Panel ID>：The panel where the repeated codes belong to.

<Loop ID>：the loop number of the devices.

<Address>: the device ID of zone.

Device Number	Panel ID	Loop ID	Address
0000036440	001	00	064
0000036440	001	01	012

Fig. 32

4.12 Device Model

Clicking

in the main screen pops up a screen as shown in Fig. 33. The screen has Device Model, Default Device Type, Optional Device Type for Selection.

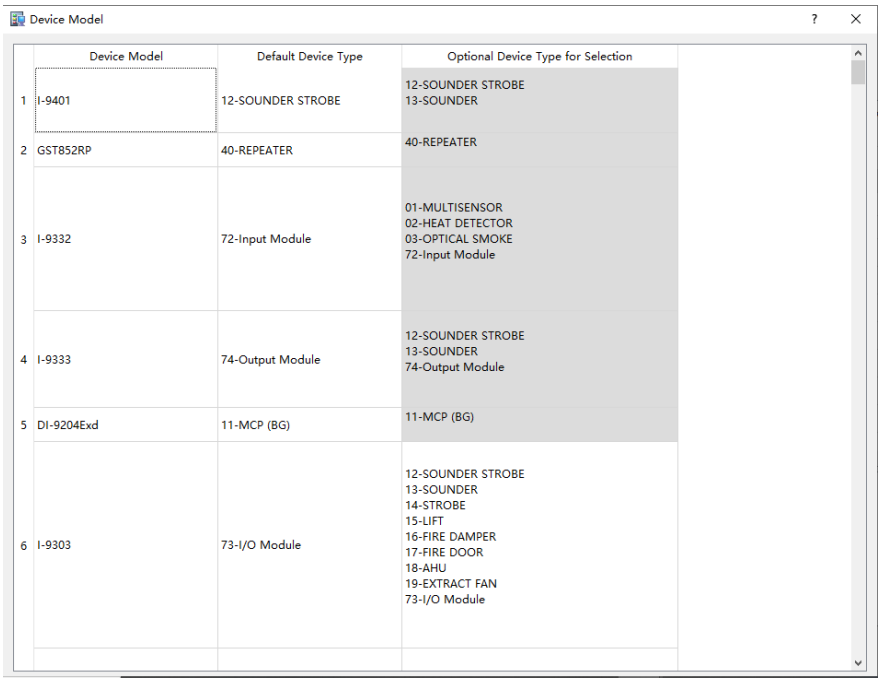


Fig. 33

4.13 Device Type

Clicking

in the main screen pops up a screen as shown in Fig. 34. The screen has Id, Name, EventType, Picture and Note.

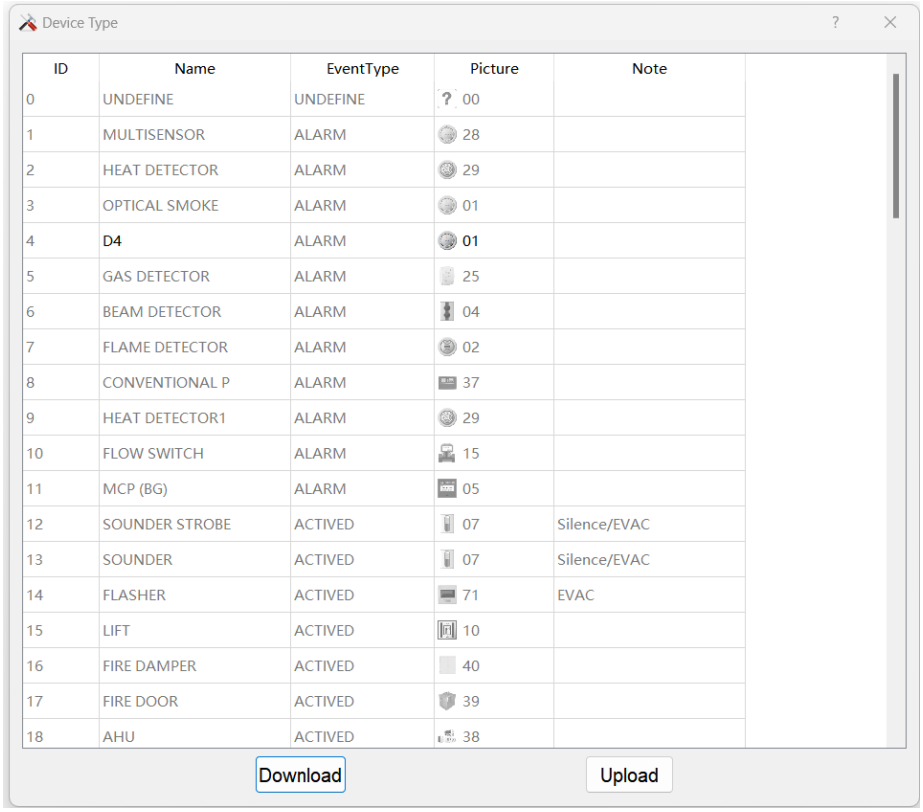


Fig. 34

4.14 Export EXCEL

Clicking

in the main screen can enter the name of the EXCEL. Presssing <Save> can export the messages of the panel to the EXCEL. Refer to Fig. 35.

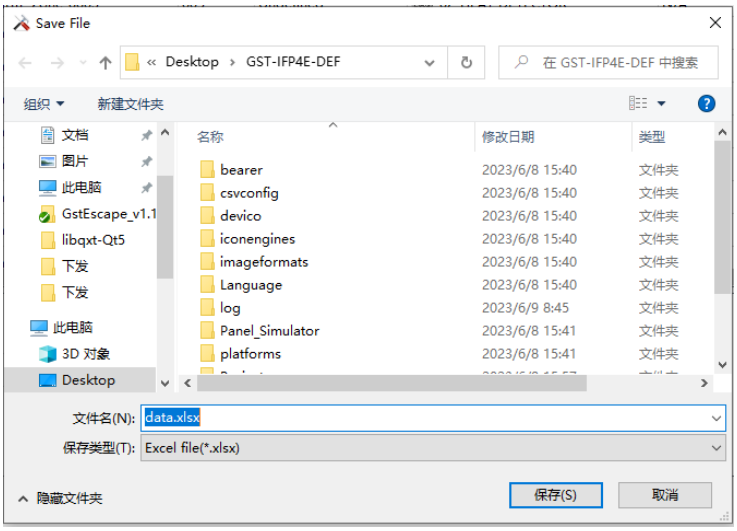


Fig. 35

4.15 Simulator

Clicking can simulate the real panels through a simulator. It is easy for comissioning. Simulating Peripheral buttons and screens are shown as in Fig. 36.

Fig. 36

The screen has two parts. The upper part is naviagor bar, including 7 buttons of Homepage, Event Log, Device View, Operate, User Set, System Set and Help. Below the navagator bar, it is an area for displaying events. It shows System Normal if there isn't any event and it shows alarm messages when an event happens as shown in Fig. 37.

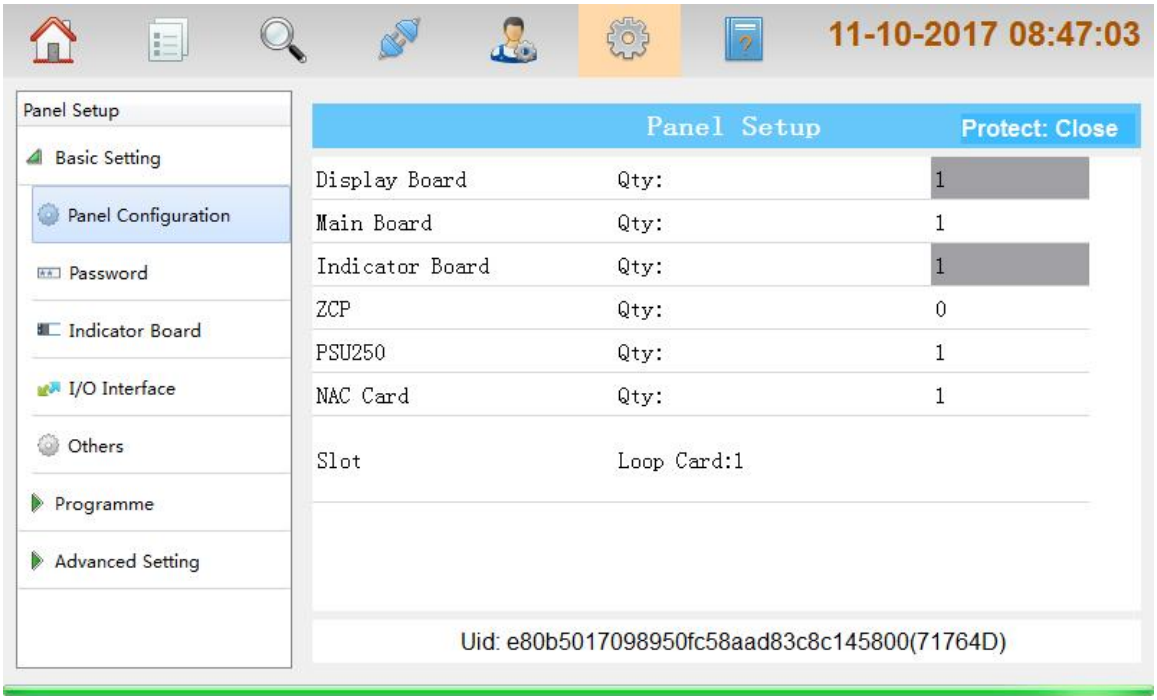


Fig. 37

Clicking on the right can offer help for users when they meet any problems of operating in other screens. Refer to Fig. 38.

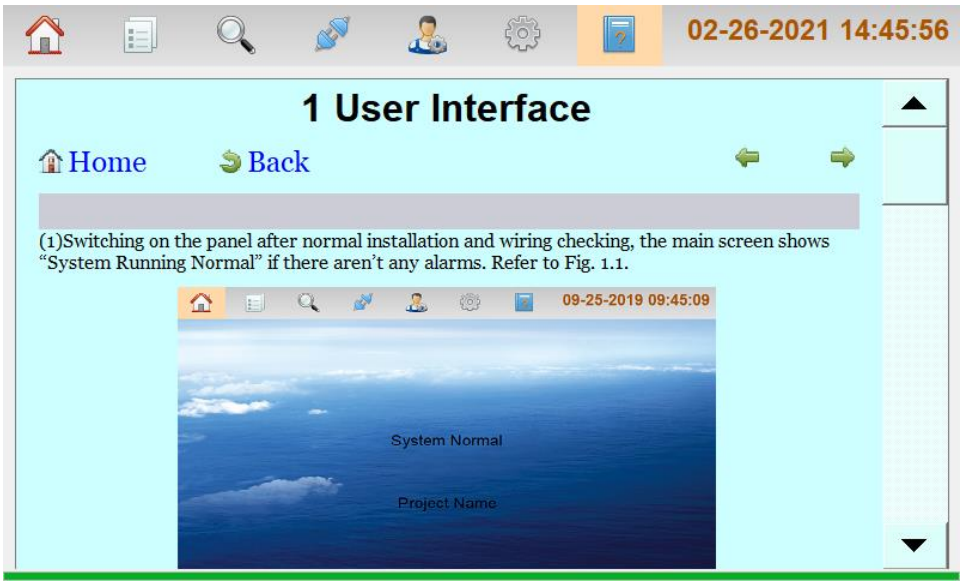


Fig. 38

The simulator has help document, so here no more description.

5 Caution

- ✧ After completing all above definitions, please make a backup of the database for future checking and modification.
- ✧ The copyright of this software is reserved by the manufacturer, and protected by law. Any copy or modification without the permission of the manufacturer is prohibited.
- ✧ This operation manual may be updated according to product upgrading without notification.

Limited Warranty

GST will repair or replace the product to the original purchaser free of charge, if defective in materials or workmanship during the warranty period, subject to the terms below. GST and CRSS are not responsible for defects or problems as a result of conditions or applications including normal wear and tear; catastrophe; fault or negligence of any user or any party other than GST and CRSS; improper installation, application, storage, maintenance, or use of products; other causes external to products; or failure to conform to any applicable recommendations of GST and CRSS. In no event shall GST and CRSS be liable for incidental, indirect, special or any other consequential damages. To the fullest extent permissible by law, the foregoing limited warranty is exclusive and in lieu of all other warranties, whether written, oral, implied or statutory. Subject to applicable law, in no event shall the liability of GST and CRSS exceed the purchase price of the products. NO IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSE SHALL

APPLY. Anybody, including the agents, distributors or employees, is not in the position to amend the contents of this warranty.

Product warnings and disclaimers

THESE PRODUCTS ARE INTENDED FOR SALE TO AND INSTALLATION BY QUALIFIED PROFESSIONALS. CARRIER FIRE & SECURITY BV, CARRIER FIRE & SECURITY AMERICAS CORPORATION AND THEIR AFFILIATE COMPANIES (TOGETHER AND EACH INDIVIDUALLY "CARRIER") CANNOT PROVIDE ANY ASSURANCE THAT ANY PERSON OR ENTITY BUYING ITS PRODUCTS, INCLUDING ANY “AUTHORIZED DEALER” OR “AUTHORIZED RESELLER”, IS PROPERLY TRAINED OR EXPERIENCED TO CORRECTLY INSTALL FIRE AND SECURITY RELATED PRODUCTS.

For more information on warranty disclaimers and product safety information, please check https://firesecurityproducts.com/policy/product-warning/ or scan the following code:

Gulf Security Technology Co., Ltd.

No. 80 Changjiang East Road, ETDZ, Qinhuangdao, Hebei,
P. R. China 066004
Tel: +86 (0) 335 8502434
service.gst@carrier.com
www.gst.com.cn