TN7000

Fire Telephone Control Panel
Installation and Operation Manual

Table of Content

1 Introduction

1.1 Overview

The fire telephone system is a special system for fire communication. The fire telephone system has a private circuit for transmitting signals. In the event of fire, the fire telephone system can be used to directly communicate with the fire control center. For example, the fire extension telephone(fixed) installed in the field can be lifted and the fire telephone mobile handset can be plugged into the fire telephone jack socket to talk with the staff in fire control center.

TN7000 Fire Telephone Control Panel(called telephone control panel for short) is new-developed complying with Chinese National Standard GB 16806-2006 Automatic Control System for Fire Protection. TN7000 Fire Telephone Control Panel can constitute a fire telephone system together with TN7100 Addressable Fire Extension Telephone and TN7300 Addressable Fire Telephone Jack Socket.

1.2 Feature

- Non-polarized two-wire for communication and talk, cost effective for wiring.
- Connect up to 100 TN7100 Addressable Fire Extension Telephone, talk with maximum 3 extension telephones simultaneously.
- Support up to 9-hour recording of talk.
- Provide 999 different kinds of messages which can be searched by type or time.
- Black and white 128×64 LCD, displaying 64 characters.

1.3 Technical Specification

• Compliance	GB 16806-2006
• Rated Voltage	24VDC（20VDC ~28VDC）
• Operating Current	＜600mA
• Capacity	100 address points（1~100）
• Voice Frequency	300Hz～3400Hz
• Crosstalk Level	＜-60dB
• Transmission Loss	＜5dB
• Loop Resistance	＜300Ω
• Communication Distance	＜1000m
• Dimension Lx W x H	483.0 mm x 200.0 mm x 88.5 mm
• Weight	3.0 Kg
• Temperature	0℃~+40℃
• Humidity	0 to 95% Relative Humidity, Non condensing

1.4 System Configuration

TN7000 Fire Telephone System includes the following equipment：

- TN7000 Fire Telephone Control Panel
- TN7100 Addressable Fire Extension Telephone
- TN7101 Fire Telephone Mobile Handset
- TN7300 Addressable Fire Telephone Jack Socket
- TN7301 Fire Telephone Jack Socket

Note: Refer to corresponding manuals for Installation and operation of TN7100 Addressable Fire Extension Telephone 、 TN7101 Fire Telephone Mobile Handset 、 TN7300 Addressable Fire Telephone Jack Socket 、and TN7301 Fire Telephone Jack Socket.

2 Structure

2.1 Appearance

The telephone control panel is plugged into a rack-type or console-type fire alarm control panel.

The appearance of telephone control panel is shown in Fig. 2-1.

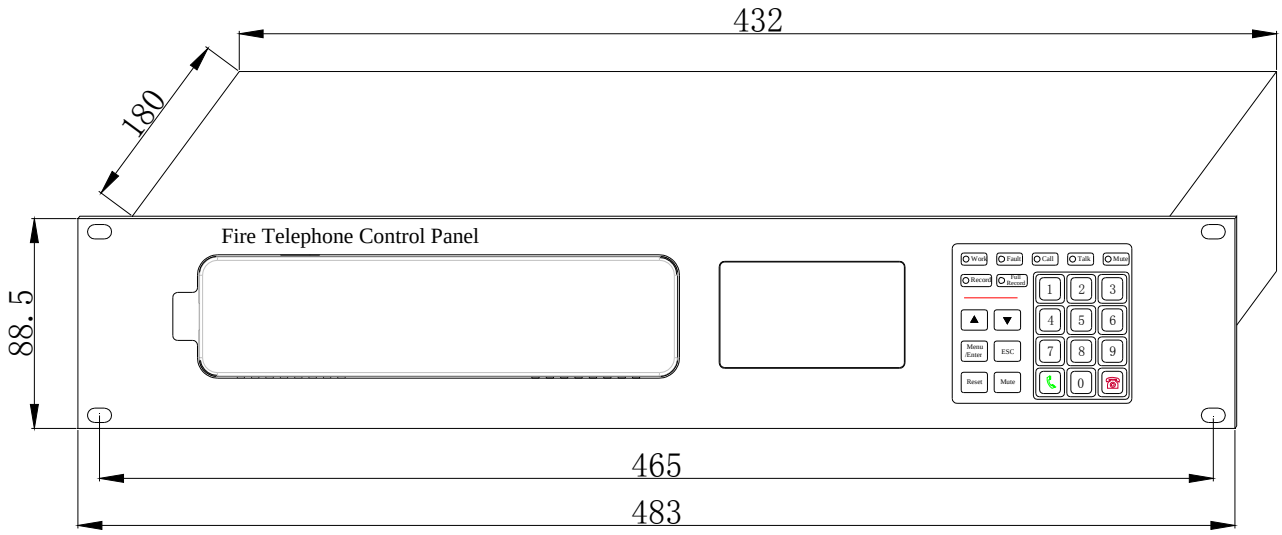

Fig. 2-1

2.2 Internal Structure

The internal structure of telephone control panel is shown in Fig. 2-2.

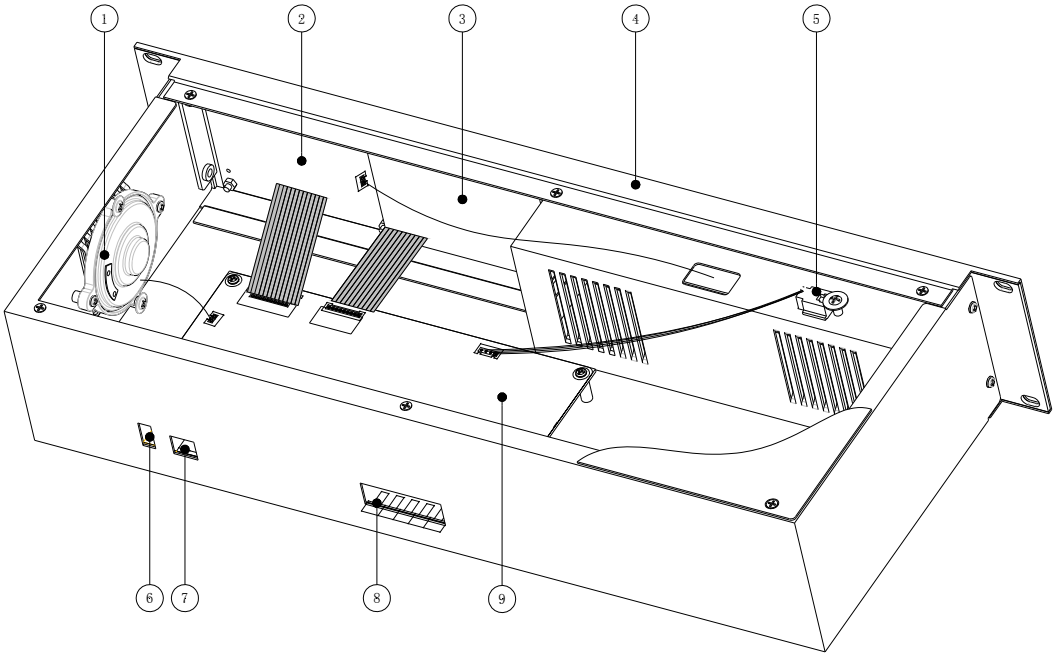

Fig. 2-2

① Speaker
② Display board
③ LCD
④ Front panel
⑤ Handset socket
⑥ U disk port
⑦ PC port
⑧ External terminals
⑨ Control panel

2.3 Front Panel

The front panel of telephone control panel is shown in Fig. 2-3.

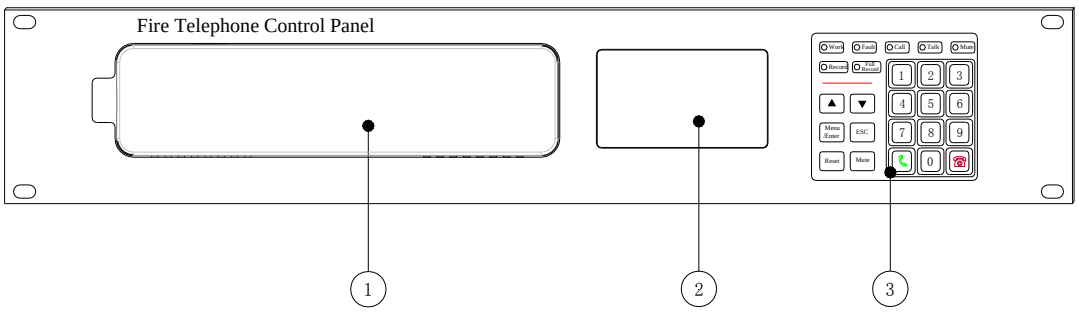

Fig. 2-3

① Handset ② LCD ③LED Indicators and Keys

LED Indicators Description

- **Work:** It lights green after the telephone control panel is powered on.
- **Fault:** It lights yellow as the telephone control panel is in fault condition.
- **Call:** It flashes red as the telephone control panel is being called.
- **Talk:** It lights red as the telephone control panel is in talk condition.
- **Mute:** It lights red as the telephone control panel is in mute condition.
- **Record:** It lights red as the telephone control panel is recording audible signals.
- **Full Record:** It lights red as the telephone control panel lacks of recording space(less than 14min).

Keys Description

- **▲,▼:** Press it to move the cursor or turn pages.
- **Menu/Enter:** Press it to enter the menu or confirm what you've done.
- **ESC:** Press it to return to the previous menu or cancel the current operation.
- **Reset:** Press it to reset the telephone control panel, the addressable fire extension telephone and the addressable fire telephone jack socket.
- **Mute:** Press it to silence the ring of the telephone control panel and fault sound.
- **Number:** Press it to dial or enter the corresponding menu.
- **:** Press it to receive the incoming call or call the extension with inputting an address code.
- **:** Press it to hang up the device that call-in, call-out, or in talk.

3 Basic Functions and Fault Alarms

3.1 Start up

As the power supply is switched on, "Work" LED lights indicating that the telephone control panel self-tests initially. After completing the self-test, the LCD displays the total quantities of online devices, extensions, and socekts of registered devices. See Fig.3-1. After about two seconds, the LCD displays the screen of normal operating as shown in Fig.3-2.

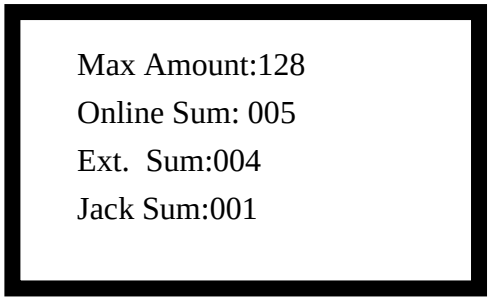

Fig. 3-1

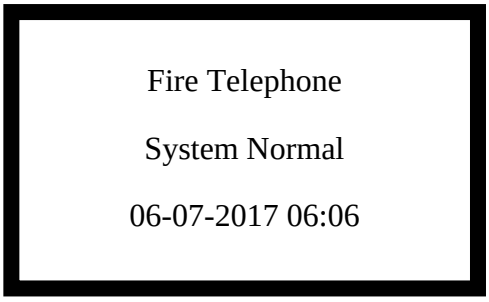

Fig. 3-2

As telephone control panel is operating normally, the LCD always displays the normal operating screen. The backlight of the LCD is turned off if there is no operation within 60s. Any button pressed or new event happened can turn on the backlight again.

3.2 Call and Talk

Call-out and talk of the telephone control panel shares one screen as shown in Fig.3-3.

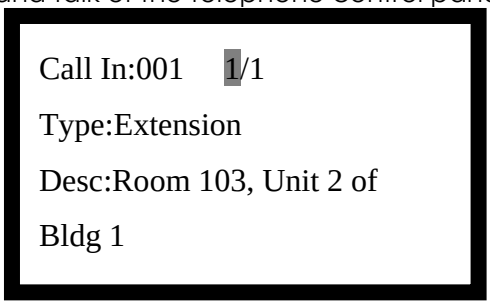

Fig. 3-3

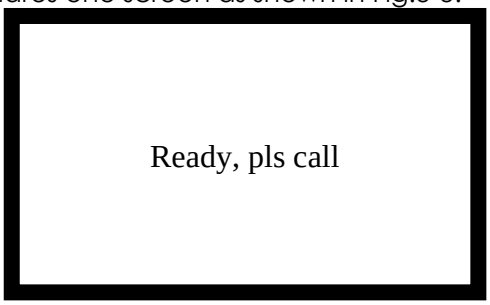

Fig. 3-4

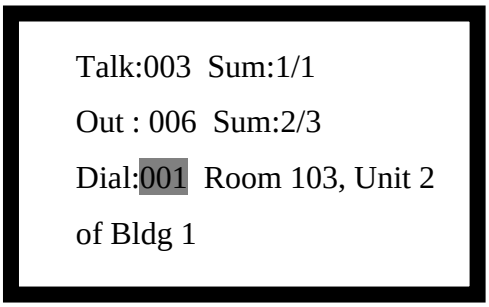

Fig. 3-5

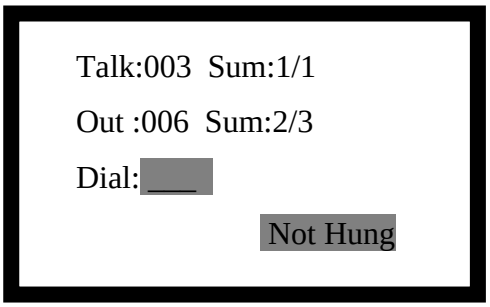

Fig. 3-6

Fig.3-3~Fig.3-6 shows the address, total quantity, the series number of the call in, talk or call out device. Respective description is shown below.

- Call in: The address code of the device calling the telephone control panel. Press【▲】or【▼】to select one of them to display the position if there are many calling devices. Press【📞】to get the incoming device and press【📞】to refuse it.
- Type: The type of the device calling the telephone control panel, such as extensions or sockets.
- Desc: Description for the position of a device imported from Graphic Monitoring Software for TX7810 Fire Control Center or U disk.
- Talk: The address code of the device in talk state. If there are many devices, the address codes are displayed in turn.
- Call out: The address code of the extension called by telephone control panel. If there are many extensions, the address codes are displayed in turn.
- Sum: m/n: The current number/total quantity.

- Dial___: Entering the address code of an extension, press 【✆】 to call it; Press 【⌐】 to cancel or end the call. The telephone control panel will displays its position description when entering the address code of a device (such as entering 001).
- Not hung: It indicates that there is a device that is not hung up when "Not hung" is displayed in the lower right corner. Press 【Menu/Enter】 to view the device number

  Note:

  Directly press 【⌐】 to end the call out then the talk as there are call out and talk at the same time.

3.2.1 Call out

Lifting the handle of telephone control panel and entering the user password, the LCD displays the screen as shown in Fig.3-4. Entering the address code of an extension, press 【✆】 to call it. The LCD displays the address code and quantity of the calling out device and there is ring inside the handset.

- As the called out extension is lifted, it enters in talk state and the ring inside the handset stops.
- As the called out extension is not lifted in 60s, the telephone control panel stops calling and the LCD displays "Missed ". The handset indicates busy tone.
- Press 【⌐】 to stop calling the extension and the handset indicates busy tone.

3.2.2 Call in

Lifting the handset, or inserting a mobile handset into the fire telephone socket, can call the telephone control panel. The LCD of telephone control panel displays call-in screen as shown in Fig. 3-3. The speaker rings and Call Indicator flashes.

- As one device calls in, lifting the handset of the telephone control panel can get it to talk.
- Press 【▲】 and 【▼】 to select the call-in device and display its position description.
- Press 【✆】 to get the current call-in directly.
- Press 【⌐】 to refuse the current call-in directly.

3.2.3 Talk

Either the telephone control panel or a field device calls one another, any of them gets it to talk. In Talk state, Talk Indicator and Record Indicator of telephone control panel light steadily and the recording starts.

- Entering the address code of a device, press 【⌐】 to end talking.

3.3 Cancel

Cancel means put the telephone receiver of telephone control panel back. There are two situations as follows:

- After call out, call in and talk are finished, the telephone receiver of telephone control panel indicates the busy tone, and the LCD displays "Call is over, please hung up". At the moment, the user should put the receiver back in order to normal operating screen.
- Either in call-out, call-in states or talk state, the telephone control panel will end all as long as the telephone receiver is put back. It will indicate the address codes for not hang up devices as shown in Fig.3-7 if there exist such ones.

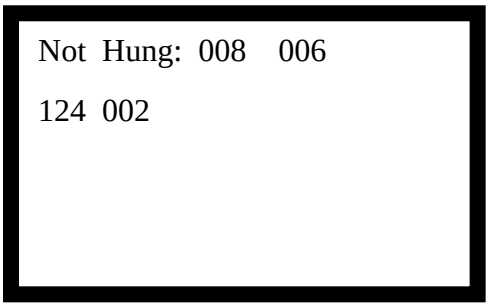

Fig. 3-7

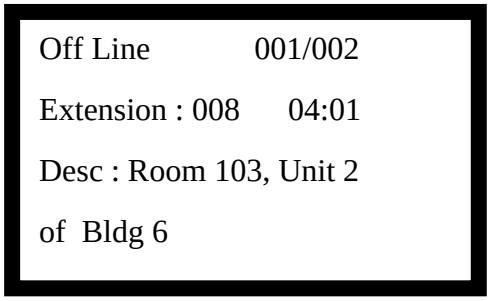

Fig. 3-8

3.4 Fault Alarm

The telephone control panel enters in fault state as the bus of telephone control panel is shorted, registered devices are lost and Jack Socket telephone line is short or open. Fault LED lights and speaker makes trouble tone (ambulance sound). Fault alarm screen is shown in Fig.3-8.

- Event: Fault type such as bus short circuit, off-line fault, short circuit and open circuit.
- Total: Current fault number and total quantity of faults.
- Device: Type and address code for the device with fault.
- Time: When fault occurs.
- Desc: Description for the position of the fault device.

3.5 Reset

Pressing 【Reset】 and entering the user password, the telephone control panel resets to perform the following functions.

- Clear fault message and call event currently displayed on the LCD.
- Reset LED Indicators.
- Eliminate speaker sound.
- Reset extensions and sockets connected to the telephone bus.

3.6 Mute

The speaker rings as the telephone control panel is being called and it makes ambulance sound as the fire telephone system has faults. The call sound rings first and then fault sound when above mentioned situations happen the same time.

Press 【Mute】 to make the speaker quiet and Mute Indicator lights in this case. The speaker make sound again and Mute Indicator turns off if there is a new call or fault.

4 Keypad and Menu

4.1 Access Level

The telephone control panel has three access levels. Higher level password can substitute for lower-level password. The operations under each level are described below.

- Access Level I: No password. Contrast setting, receiving or ending a call can be done under level 1. Besides, silencing the sound, messages browsing can also be carried out.
- Access Level II: User password. Dialing, reset, self-test can be done under level II. Besides, playing recording, setting time and local address can be also carried out. The initial user password is 1234 which can be modified later.
- Access Level III: Manager password. Device registration, addressing inspection and off-line programming can be done under level III. Besides, erasing recording and password modification can also be carried out. The initial manager password is 1357.

Note: Passwords at all levels are the "keys" for the user to set the telephone control panel. Therefore, as the user uses it, it should be kept by a special personnel to prevent others from modifying telephone control panel.

4.2 Main Menu

The menu of the telephone control panel contains many sub-menus with simple structure and operation. Press 【Menu/Enter】 to access the main menu as shown in Fig.4-1 as the telephone control panel is in normal operating state.

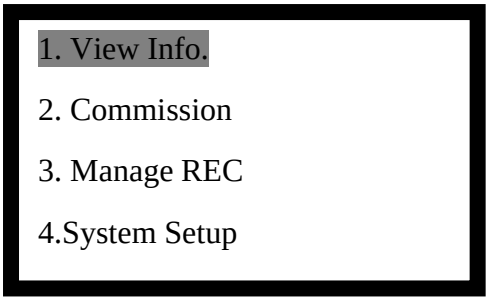

Fig. 4-1

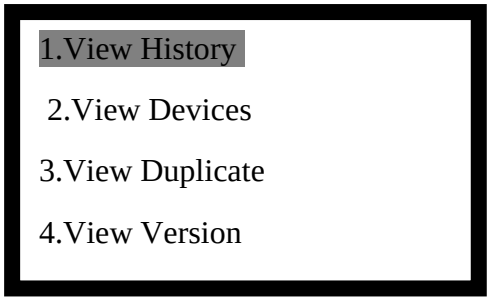

Fig. 4-2

Entering the following menu and returning to the previous menu are as follows.

- Move the cursor to the proper position by pressing【▲】and【▼】. Press 【Menu/ENT】 to enter the next sub-menu.
- Enter the next sub-menu by pressing the proper number before the current menu.
- Press【ESC】to return to the previous menu.

4.3 View Information

Select "1. View Info." in Fig.4-1 to enter the screen of Fig.4-2 showing four sub-menus.

4.3.1 View History

History record saves running and operation messages of the telephone control panel. Each message includes event type, device type and date & time for the message.
Select "1. View History" in Fig.4-2 to enter the screen of Fig.4-3 showing two sub-menus.

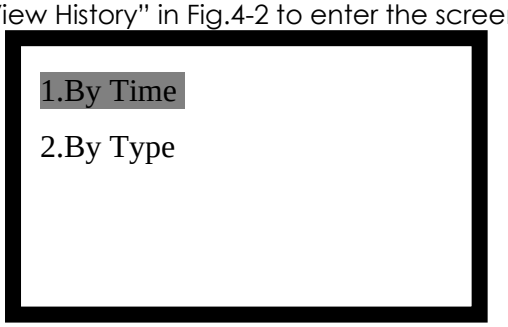

Fig. 4-3

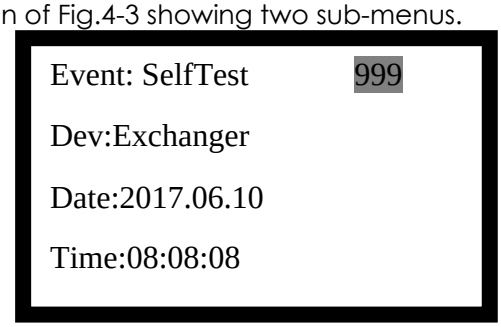

Fig. 4-4

- Select "1.By Time" to enter the screen of Fig.4-4. History record can be browsed in time order. Pressing【▲】and【▼】 can view the last or next message. Up to 999 history record can be browsed.
- Select "2.By Type" to enter the screen of Fig.4-5 showing three sub-menus. The user can browse messages quickly according the message type. Operation type includes start-up, self-test, reset and registration. Telephone type includes call in, call out, lifting and hanging up a call. Telephone type also contains refusing a call, cancelling call in or call out. Both overall hang up and no answering belong to this type. Fault type consists of short circuit, off line fault, socket short or open, and fault recovery.

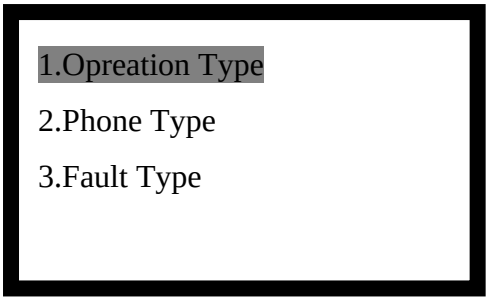

Fig. 4-5

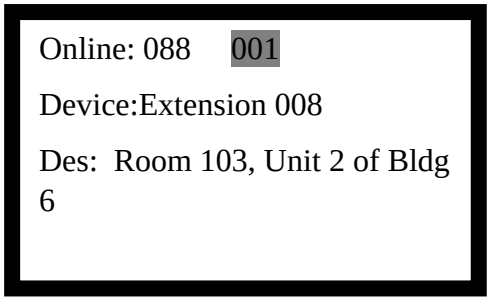

Fig. 4-6

4.3.2 View Devices

Select "2.View Devices" in Fig.4-2 to enter the screen of Fig.4-6 for browsing device total and device information. Description can have 23 characters. Pressing【▲】 and【▼】can view the last or next message of on-line device.

4.3.3 View Duplicate

Select "3.View Duplicate" in Fig.4-2 to enter the screen of Fig.4-7 for looking up duplicated code of registered devices.

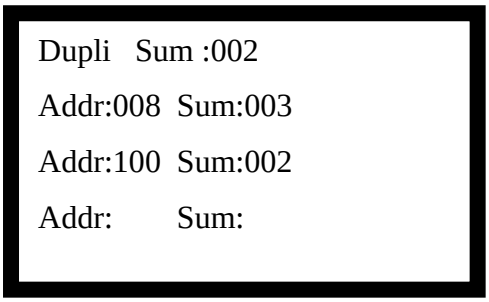

Fig. 4-7

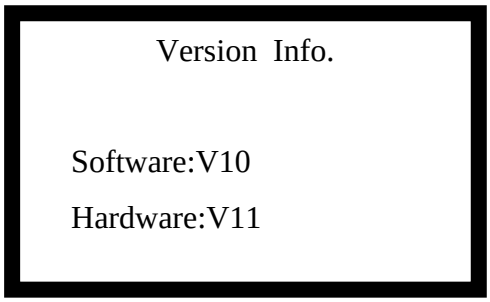

Fig. 4-8

Dupli sum is the number of addresses of repeated devices. Address is the address of the device with repeated code. Sum is the address for the number of devices with repeated code. Each page can display up to three repeated addresses. Press【▲】 and【▼】to turn pages for more.

4.3.4 View Version

Select "4.View Version" in Fig.4-2 to enter the screen of Fig.4-8 for looking up the software and hardware version.

4.4 Commission

Selecting "2. Commission" in Fig.4-1 enters the screen of Fig.4-9 showing four sub-menus.

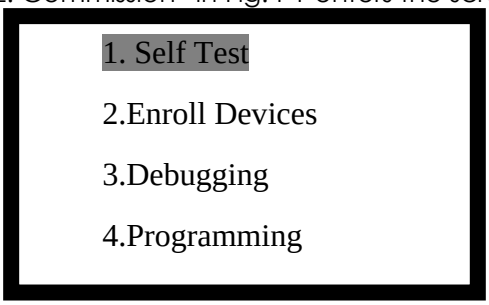

Fig. 4-9

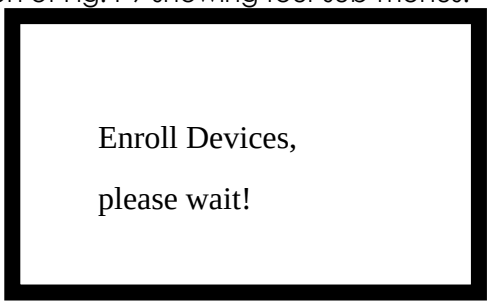

Fig. 4-10

4.4.1 Self Test

Selecting "1. Self Test" in Fig.4-9 and entering the user password, the telephone control panel starts

self-test. LCD displays company LOGO and the screen with black and white blocks. Except for work Indicator, other Indicators flash twice and the speaker rings. After completing self-test, LCD shows the normal operating screen.

4.4.2 Enroll Devices

Selecting "2. Enroll Devices" in Fig.4-9 and entering the manager password shows the screen of Fig.4-10, the telephone control panel starts registering on-line fire telephone extensions and fire telephone jack sockets.

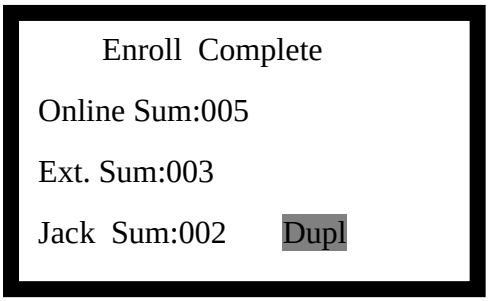

Fig. 4-11

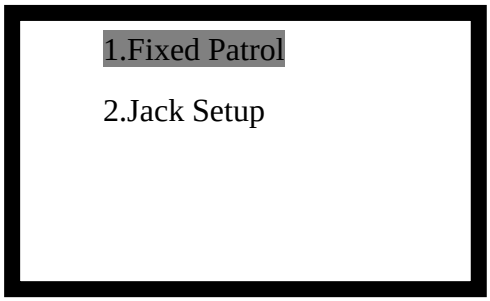

Fig. 4-12

Fig.4-11 screen is shown after completing enroll.

- Online Sum: The total quantity of on-line devices.
- Ext. Sum: The total quantity of on-line extensions.
- Jack Sum: The total quantity of on-line jack sockets.
- Dupl: Registered devices have share addresses, as "Dupl" appears on the right lower corner. In this case, modify the device address and enroll it again.
- The screen shown as Fig.4-11 goes back to the normal operating screen after about four seconds. Refer to Section 4.3 for looking up registered devices or repeated codes.

Note:

Fire telephone extensions and fire telephone jack sockets connected to telephone control panel must be enrolled and logged in. The telephone control panel can monitor those devices after that.

4.4.3 Debugging

Selecting "3. Debugging" in Fig.4-9 and entering the manager password shows the screen of Fig.4-12 for 2 sub-menus.

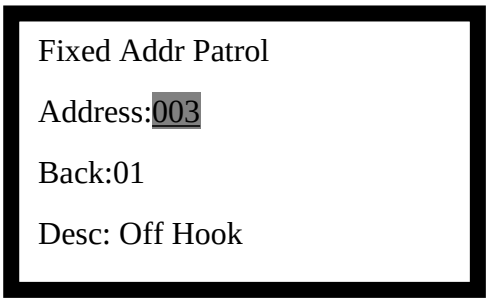

Fig. 4-13

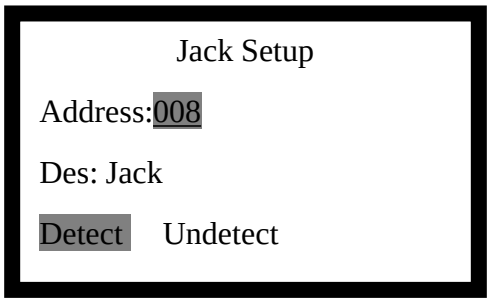

Fig. 4-14

- Select "1. Fixed Patrol" to enter the screen of Fig.4-13. Entering an address code, press 【Menu/Enter】 to view the state of this address.
- Selecting "2. Jack Setup" in Fig.4-12 and entering an address code, press【Menu/Enter】 to view on-line state and device type of this address. The screen of Fig.4-14 is accessed if the device belongs to jack socket type. Pressing 【▲】 and【▼】 can select circuit checking or not. The press【Menu/Enter】to confirm.

4.4.4 Programming

Selecting "4. Programming" in Fig.4-9 and entering the manager password to enter the screen of Fig.4-15 showing three sub-menus.

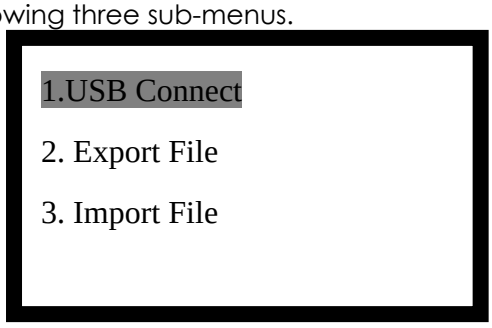

Fig. 4-15

Fig. 4-16

- Selecting "1.USB Connect" and entering the screen of Fig.4-16. Connect the USB interface (Type B) of the telephone control panel to the computer with a USB cable, then the screen suggested "USB Connected". At the moment, Description for the position of a device(extension or Jack) can be imported from Graphic Monitoring & Control System Configuration Software TX7810 to the flash of telephone control panel. After successful download, you can view the description of the device through the device information menu.

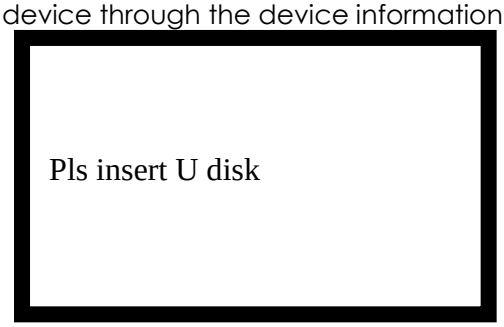

Fig. 4-17

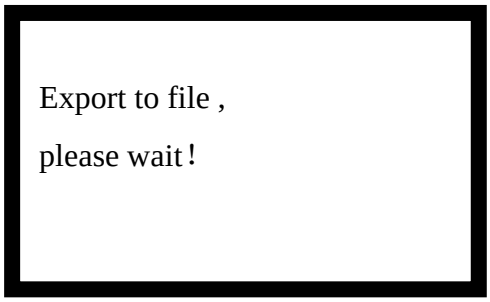

Fig. 4-18

- Selecting "2. Export File" enters the screen of Fig.4-17. Inserting U disk into the USB（Type A）port, the telephone control panel identifies it and then enters the screen of Fig.4-18. At the moment, the telephone control panel automatically saves 《DeviceInformation + local address.csv》 and 《HistoryInfomation+local address.csv》 to U disk and returns to the previous screen.
  - 《DeviceInformation +local address.csv》: includes device address, device type and device description.
  - 《HistoryInfomation +local address.csv》: includes running and operation messages of the telephone control panel. Each message contains event type, device type and date & time for the message.
- Selecting "3. Import File" enters the screen of Fig.4-17. Inserting U disk into the USB（Type A）port, the telephone control panel identifies it and then enters the screen of Fig.4-18. At the moment, the telephone control panel automatically saves 《DeviceInformation +local address.csv》 to the flash and returns to the previous screen.

Note:

- **Before importing，make sure there is a file named 《DeviceInformation +local address.csv》 in the U disk!**
- **Please do "U Disk Export" first if the customer doesn't know the file format reqirement. Fill device description in the exported 《DeviceInformation +local address.csv》 and then do "U Disk Import".**
- **Don't use the mark of "" for device description.**

4.5 Recording Management

Selecting "3. Manage REC" in Fig.4-1 enters the screen of Fig.4-19 showing for three sub-menus.

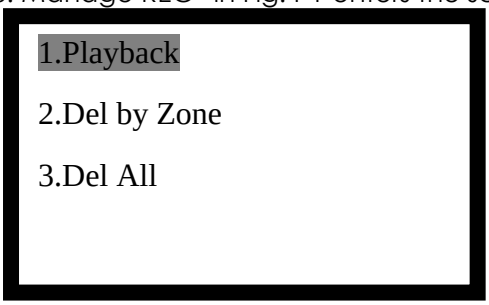

Fig. 4-19

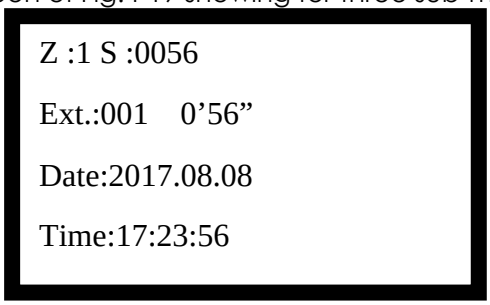

Fig. 4-20

4.5.1 Playback

Selecting "1. Playback" in Fig.4-19 and entering the user password, shows the screen of Fig.4-20.

- Z, S: Recording No. in the storage area.
- Ext.: The device type and address code of recordings.
- 0'56": How long the recording is.
- Date & Time: When the recording starts.

Pressing 【Menu/Enter】, the LCD indicates "Play" on the right upper corner and the recording begins playing. At the moment, the recording is reduced by seconds until it is 0' 0" meaning that the segment of recording ends. Pressing 【ESC】 stop playing the recording. Pressing 【▲】 and 【▼】 can select the last or the next segment of recording.

4.5.2 Delete by Zone

Selecting "2. Del by Zone" in Fig.4-19 and entering the manager password shows the screen of Fig.4-21 for looking up the rest of four storage space.

The fire telephone control panel has four recording space and each recording space can saves up to 2 hours and 16 minutes with 8160 segments. The fire telephone control panel saves the recordings from zone 1 to zone 4 and then to zone1. The LCD indicates "Lack of Space" as the space can only hold 14-minute recording. Full Record LED lights red and the speaker gives fault sound to inform users of disposing of it. The recording will stop as it reaches "Full Record". At the moment, the LCD shows that "The recording stops due to full record.

Press【▲】and【▼】to select a zone to delete. Then press 【Menu/Enter】 to delete the recording and the storage space shows " 100% Free".

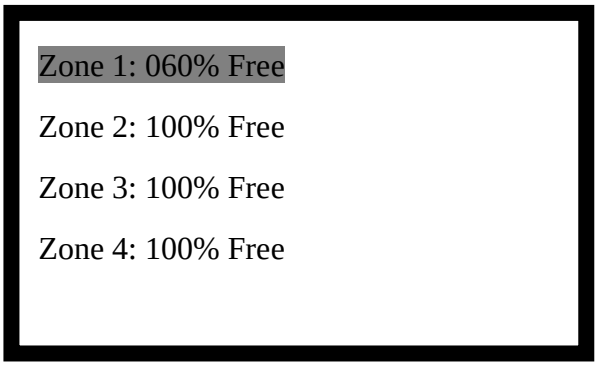

Fig. 4-21

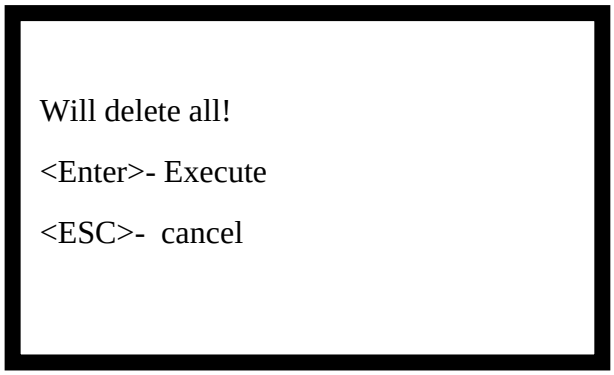

Fig. 4-22

4.5.3 Delete All

Selecting "3. Del All" in Fig.4-19 and entering the manager password shows the screen of Fig.4-22. Press 【Menu/Enter】to delete all recordings and press 【ESC】to cancel the operation.

4.6 System Setup

Selecting "4.System Setup" in Fig.4-1 enters the screen of Fig.4-23 showing two sub-menus.

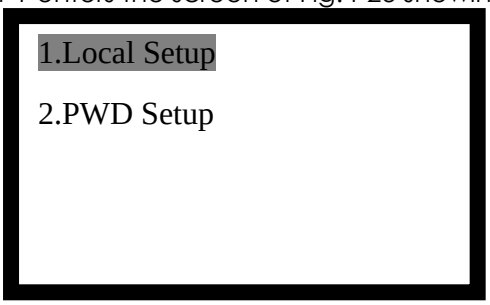

Fig. 4-23

4.6.1 Local Setup

Selecting "1.Local Setup" in Fig.4-23 enters the screen of Fig.4-24 showing four sub-menus.

- Selecting "1.Contrast" enters the screen of Fig.4-25. Pressing【▲】 and【▼】modifies the contrast of the LCD. Press【Menu/ENT】to save the modification and exit. Press【ESC】to cancel the operation.
  LCD contrast can be adjusted between 0 and 20, and ex-factory setup is 15.
- Selecting"2. Date & Time" in Fig.4-24 and entering the user password shows the screen of Fig.4-26. Pressing【▲】 and【▼】 move the cursor to the position of year, month, date, hour, minute, or second. Enter the actual value（if the entered value is illegal, it cannot be saved）. Press【Menu/Enter】to save the modification and exit. Press【ESC】to cancel the operation.
- Selecting"3.Local Addr" and entering the user password shows the screen of Fig.4-27. Enter the actual value（if the entered value is illegal, it cannot be saved）.Press【Menu/Enter】to save the modification and exit. Press【ESC】to cancel the operation.
  Local address ranges from 01 to 99, and ex-factory setup is 01. The local address of the telephone control panel should not be repeated in order to export/import files of the USB conveniently when there are many fire telephone control panels in a project.
- Selecting"4. Language" and entering the user password shows the screen of language option. Then the proper language can be selected.

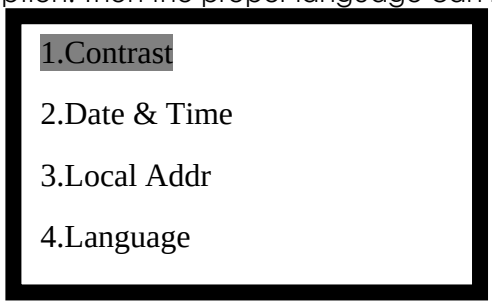

Fig. 4-24

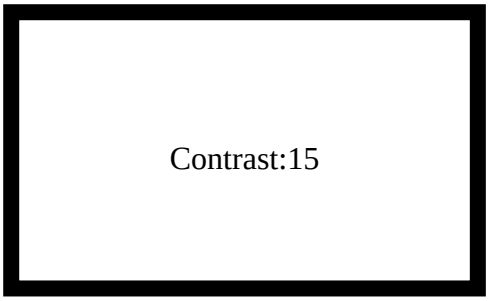

Fig. 4-25

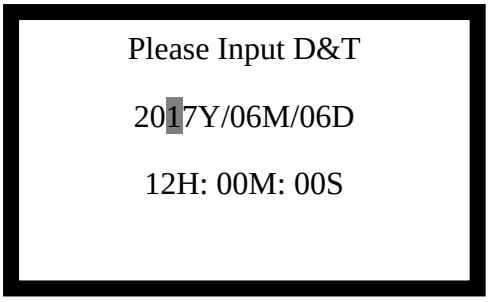

Fig. 4-26

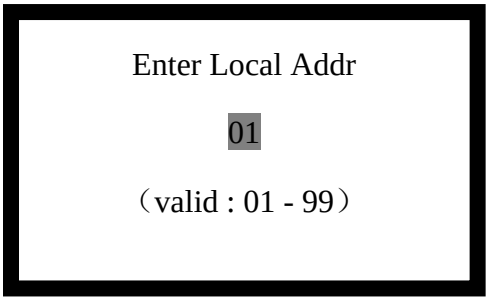

Fig. 4-27

4.6.2 Password Setup

Selecting"2. PWD Setup" in Fig.4-23 enters the screen of Fig.4-28.

- Selecting"1.User PWD" and entering the user password shows the screen of Fig.4-29 for modifying the user password. Enter a new password (4 digit) after "Enter:", then wirte it again after "Confirm:". Press【Menu/Enter】 to show "Set Succeed" if the password entered twice is the same. The system saves the new password and exits the current menu. Press 【Menu/Enter】 to show "Set Failed" if the password entered twice is different. The system doesn't save the new password and exits the current menu.Or press【ESC】 to exit directly.
- Selecting"2.Admin PWD" and entering the manager password shows the screen for modifying the manager password. The modification method is the same as that of the user password.

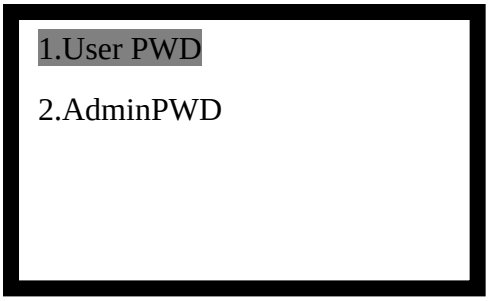

Fig. 4-28

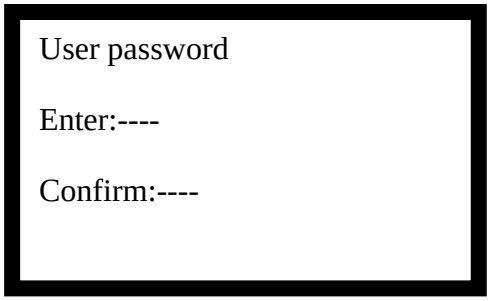

Fig. 4-29

5 Installation and Commission

5.1 Check

5.1.1 Open-package Check

First check its package to make sure there is no obvious damage after receiving product. Then unwrap the package to check items inside according to the packing list. Finally, check the appearance of the product. Please contact technical service department of Tanda Company if non-compliance is found.

5.1.2 Start-up Check

Before start-up check, all wires of the fire telephone control panel should be disconnected. Then follow the steps below to install.

- Connecting to the power supply，check the input voltage of 24VDC (it should be between 20V and 28V) with a multimeter.
- Connecting the DC 24V power supply to the power input terminal (D1, D2) of the fire telephone control panel, check whether the LCD, LEDs, speaker, and etc. are normal during the self-test.

- After completing self-test, check fault messages and make sure buttons are used normally.
- Selecting "System Setup -> Local Setup -> Date & Time" In the main menu to modifie date and time. After modification, press【Menu/Enter】 to save.
- The fire telephone control panel operates normally if the above mentioned tests have been passed. The start-up check completes after disconnecting the power supply.

5.2 Installation

5.2.1 Mounting

- The product should be installed in the place where a person is on duty. In addition, it also should be set far away from electromagnetic interference.
- Plug-in installation, occupying 2U front panel sizes.
- Fasten the product to the rack using 4 M5×10 cross recessed pan head screws.

5.2.2 Wiring

External terminals of the fire telephone control panel are shown in Fig.5-1.

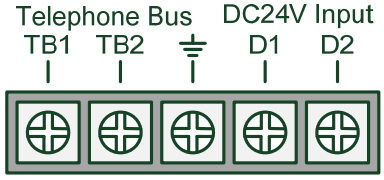

Fig.5-1

- TB1, TB2: Output terminals of the telephone bus.
- ⏚: Earth terminal of the chassis.
- D1, D2: Non-polarized 24VDC power input terminals.

5.2.3 Wiring Requirements

- 24V power cord: BV 2×1.5mm² or above cable.
- Telephone bus: RVVP-2×1.5mm² or above shielded wire are used, laid through a metal pipe or flame retardant PVC pipe.
- Don't put the telephone bus, alarm bus and other communication bus in the same multicore cable.

5.3 Commission

5.3.1 Before Commission

After start-up check, the fire telephone control panel should connects with telephone extensions and sockets programmed address codes through telephone bus.
After wiring and checking, switch on the power of the fire telephone control pane. Please refer to "Chapter 6 Troubleshooting" for judgment and solution if problems are found.

5.3.2 Device Register

Refer to "4.4.2 Enroll Devices" for registering of on line extensions and sockets. After registration, check if the result is the same as the number of actual connected devices.
Note: Address codes for extensions and jack sockets shouldn't be repeated, otherwise it will indicate repeated code when registering. Selecting"4.3.3 View Duplicate" can view the devices sharing the same address code. Modify the address code and then register that device again.

5.3.3 Analog Call Test

Check if the corresponding fixed extension is called as the fire telephone control panel calls it. Lifting the handset check if it can talk normally. Inserting a portable handset into any socket, check if the fire telephone control panel is called and then talked normally.

6 Troubleshooting

1. How to solve as the fire telephone control panel has short fault on the telephone bus.
   First disconnect the power supply, then find and remove the short circuit, finally connect to the power supply.
2. How to solve as the fire telephone control panel has a fault such as a device is not on-line.
   Register on-line devices once more.
3. How to solve as the fire telephone control panel has a fault such as a socket is short .
   Find and remove the short circuit of the socket.
4. How to solve as the fire telephone control panel has a fault such as a socket is open.
   Check if there is an end-of-line resistor on the circuit.
5. How to solve as the fire telephone control panel crashes or runs abnormally.
   First disconnect the power supply, then connect it after minutes. Finally check keys to make sure they are operated normally.

7 Maintenance

7.1 Cautions

1. Operators should be trained and qualified.
2. People not authorized should not operate keys and buttons.
3. Wiring or wiring modification, plugging and unplugging various connectors can't be done until the power is off.
4. Talk test should be done every month.
5. Shipment and Storage: The product should be well packaged and gently taken to avoid damage while transporting, handling and storing. The environment for storing the products should be ventilated and dry. However, open storage is not allowed in any way.
6. Used in Projects: After completing the construction of projects, the product can be unpacked and installed for system commission.。
7. The ambient environment should be sun screen, heat proof, dust proof and damp proof.
8. Occasionally you should dust the unit all over with a soft cloth. For stubborn stains, use a soft cloth dampened with a weak solution of mild detergent and water. Dry the unit immediately afterwards with a clean cloth. Don't spray the detergent on the unit directly.
9. Don't disassemble the product by yourself.
10. Don't move this product with power.

7.2 Important Notes

1. People without authorization shouldn't operate this product.
2. Password should be kept by a special person. Don't disclose passwords.
3. The product should be shut down and maintained by a specialist or a person on duty. After ensuring that no fault exists, the product can be started.

7.3 Warranty

1. The product shall be regularly maintained by our company's technicians with reasonable fees charged (free of charge within the warranty period).
2. In order to meet the needs of users with more satisfaction, the product will be guaranteed for 12 months from the date of purchase. The company will repair product for free if there is a problem within the warranty period. We are not responsible if the problem is caused by the user rather than itself.

8 Appendix A Load Quantity Calculation

The bus of TN7000 Fire Telephone Control Panel can provide maximum 60mA for monitoring loads, talking up to 3 TN7100 extensions or TN7300 jack sockets together. The number of connected devices

can be calculated based on the total standby current which is not more than 60mA.The quantity of connected devices can be calculated according to the following table（unit: mA）.

Model	Name of Product	Quantity		Standby Current	Total Standby Current
TN7100	Addressable Fire Extension Telephone	A	×	0.60	=
TN7300	Addressable Fire Telephone Jack Socket	B	×	1.60	=
TN7301	Fire Telephone Mobile Handset	C	×	0.02	=
Total Standby Current					（mA）

So, the total standby current is: A×0.6 + B×1.6 + C×0.02 ≤ 60.

Note:

Monitoring load current of the fire telephone control panel should not higher than 60mA to keep the system stable and reliable.

9 Statement

This manual carefully introduces features and usage of TN7000 Fire Telephone Control Panel. We work to provide the latest information of our products. However, we still cannot cover all applications or predict all requirements. Therefore, the product may be modified without prior warning. Please contact us if you need further messages.

Besides, please pay attention to the following instructions.

1. As a precise electronic equipment, this product should be kept by a special person. People without authorization shouldn't operate it freely.
2. When using this product actually, the power should not exceed the rated power.
3. Do not increase the installed capacity by yourself after completing acceptance test of the project. If necessary, please contact our technicians for details. At the same time, new equipment needs a new system not affecting the current one.
4. Don't modify internal structure and external wiring of the product after completing acceptance test of the project. If necessary, please contact our technicians for details.
5. After reconstruction of the project site, the system where the equipment is located must be commissioned and inspected by professional staff again. The product can't be used until it has passed the inspection.
6. As the project passing the acceptance test is used, please dispose of it in time if on-site equipment occurs fault.

Tanda Company is not responsible for any losses or damages caused by violation of the above instructions.