

# PREMIER ADDRESSABLE FIREFIGHTING TELEPHONE SYSTEM

## OPERATION MANUAL



# Caution

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**Be sure to read the warnings and instruction items remarked on in this manual and equipment.**

This system uses 230V AC power supply. The power supply built into the power supply unit switches 230V AC into 24V DC and provides operating voltage for the system. The voltage of the external output terminal is below 24V DC. Ensure the equipment is well earthed to avoid danger caused by output terminal. Incorrect operation may give rise to damage to the equipment. Complying with the following instructions of installation, operation and maintenance will help keep the system healthy.

1. Read the operation manual.

To get full use of the system and to ensure personal safety please read and familiarise yourself with this manual and system.

2. Power supply

Use of power supply of 230V AC, 50~60Hz. Ensure the box is well earthed for the personal safety of users and to reduce the noise from interference during communications. Wait at least 5 minutes before resetting the telephone exchange.

3. Keep the main set away from heat source,

E.g. air conditioner or heater for proper ventilation and cooling.

4. Do not install the system in areas that are damp or humid, e.g. basement and other similar places.

5. Moving the equipment from Outdoors to indoors prior to Installation the user should Wait 30mins to reduce the Risk of condensation.

6. Avoid exposing the LCD to direct sunlight. When the surface temperature exceeds 50C permanent damage may be caused.

7. Ensure the equipment is well earthed.  
There will be interference during communication if incorrectly earthed to the 230V AC terminal.








8. Automatic self diagnostic function..  
. Please contact us whenever there is any problem.

ADRESSABLE PREMIER FIREMAN TELEPHONE SYSTEM.

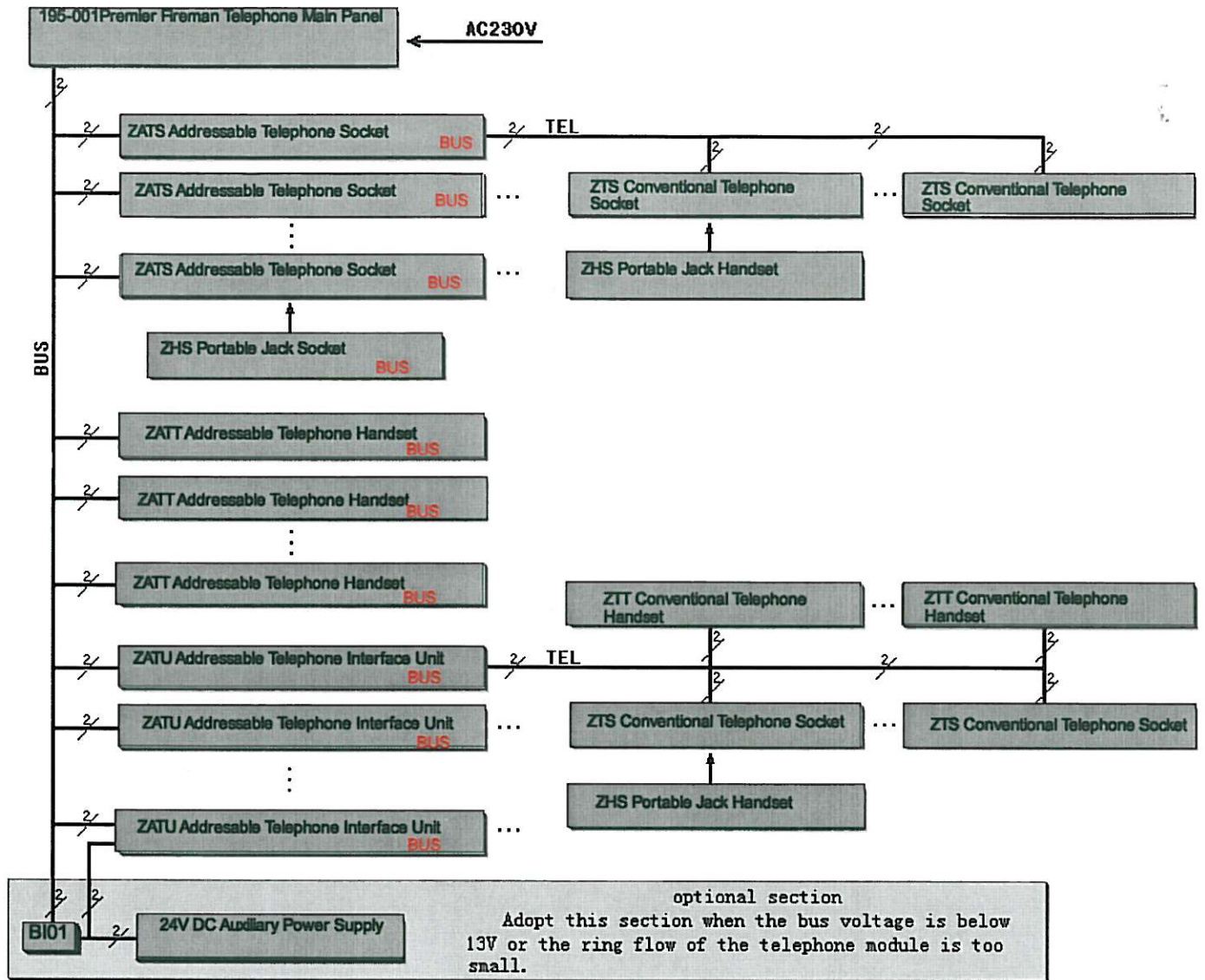
1 Features and main performance of the system

1.1 Please refer to 195-001 PREMIER ADRESSABLE FIREMAN TELEPHONE SYSTEM.

2 Product lines.

Name of Product	Model	Quantity	Example Shown (colour may vary)
PREMIER FIREMAN TELEPHONE MAIN PANEL	PFT	1	
ADRESSABLE TELEPHONE HANDSET RED (UNBOXED)	ZATT	3	
ADRESSABLE TELEPHONE SOCKET	ZATS	3	
ADRESSABLE TELEPHONE INTERFACE MODULE	ZATU	3	
CONVENTIONAL TELEPHONE HANDSET RED (UNBOXED)	ZTT	3	
PORTABLE JACK HANDSET	ZHS	3	
COVENTIONAL TELEPHONE SOCKET	ZTS	3	

Schematic diagram of the system



4. Selection of bus cable

- 4.1 The total current of ZATT, ZATS, and ZATU in standby state should be allowed for. This current may cause a voltage drop on bus cable. A bus voltage exceeding minimum permitted value (13V) should be ensured to power the three above-mentioned equipments (refer to the technical performance).
- 4.2 Do not take the current of ZTS, ZHS ZTT connected to equipment expanding port into account for they do not consume current during standby state.
- 4.3 With the use of twisted pair wire, if the transverse section is more than 1 square millimeter. This kind of wire can reduce audio interference if used outdoors. If the system works in harsh environmental conditions (such as outdoors, or if placed close to high voltage or equipment of high power), we suggest screened twin cable. Be sure to earth the screened layer or connect it to the negative pole of power supply section of 24V DC.
- 4.4 Use twisted pair wire of RVS1.5mm. Distributing the bus-system extensions or bus-system sockets evenly. The length of bus can be up to 1.5km.
- 4.5 If the ZATU is mounted more than 50M from the telephone exchange or another ZATU an auxiliary power supply section (DC24±6V) must be connected in.

4.6 If the voltage of the end of bus drops below 13V, connect an auxiliary power supply section into the area that has the low voltage. The power supply section must be connected via a choke coil BL01 and the polarity of this power supply section must be line with the polarity of bus voltage.

5. Wiring of telephone exchange

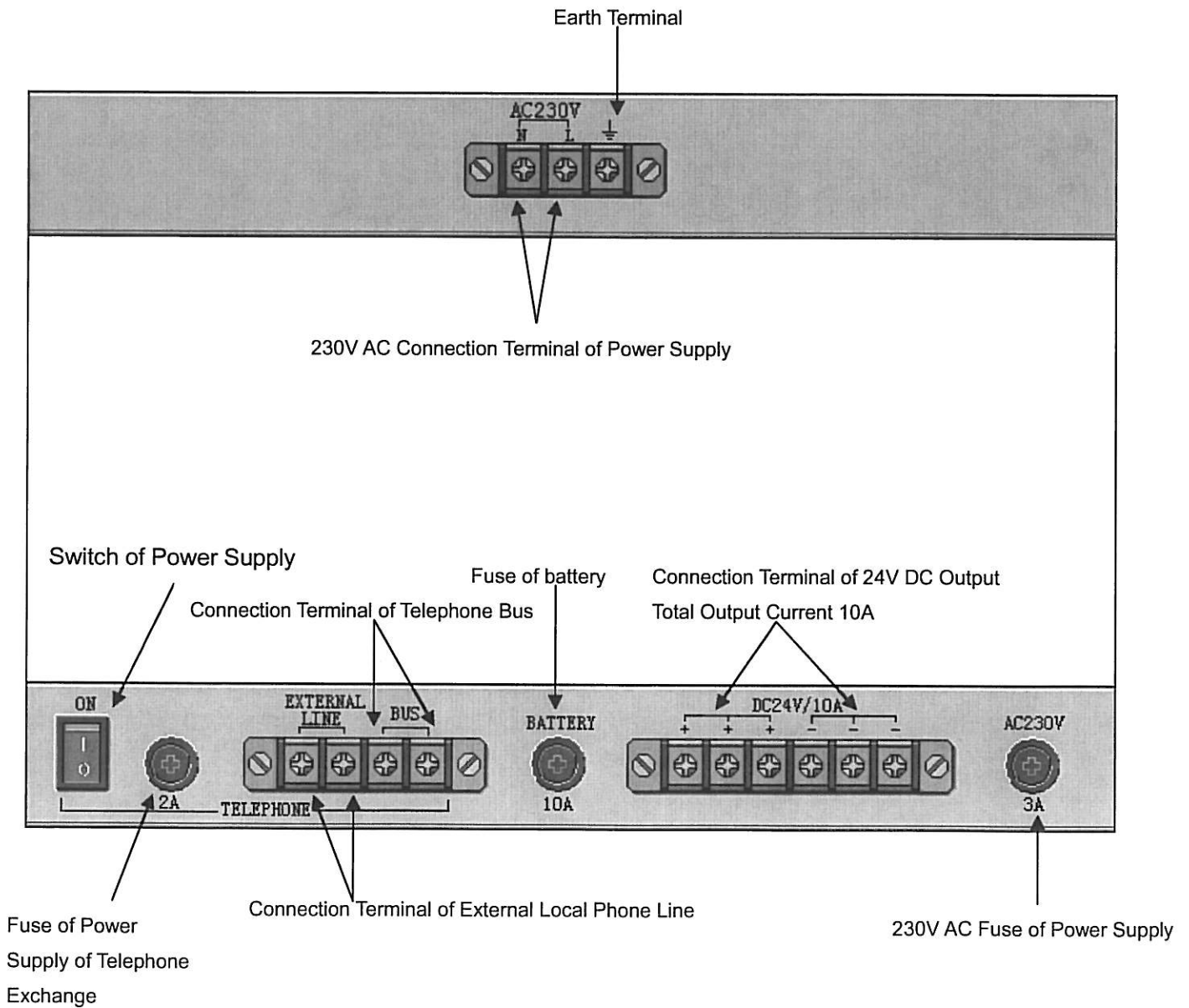
The wiring terminal is located in the box of PFT. Open the front door and then open the panel door, you can see the wiring board of the main electricity power supply section and the comprehensive wiring board at the top of the box. The functions are illustrated as per the following drawing.

To ensure distinct communication quality, the cable should be earthed well. Do not connect to the earth of 230V AC.

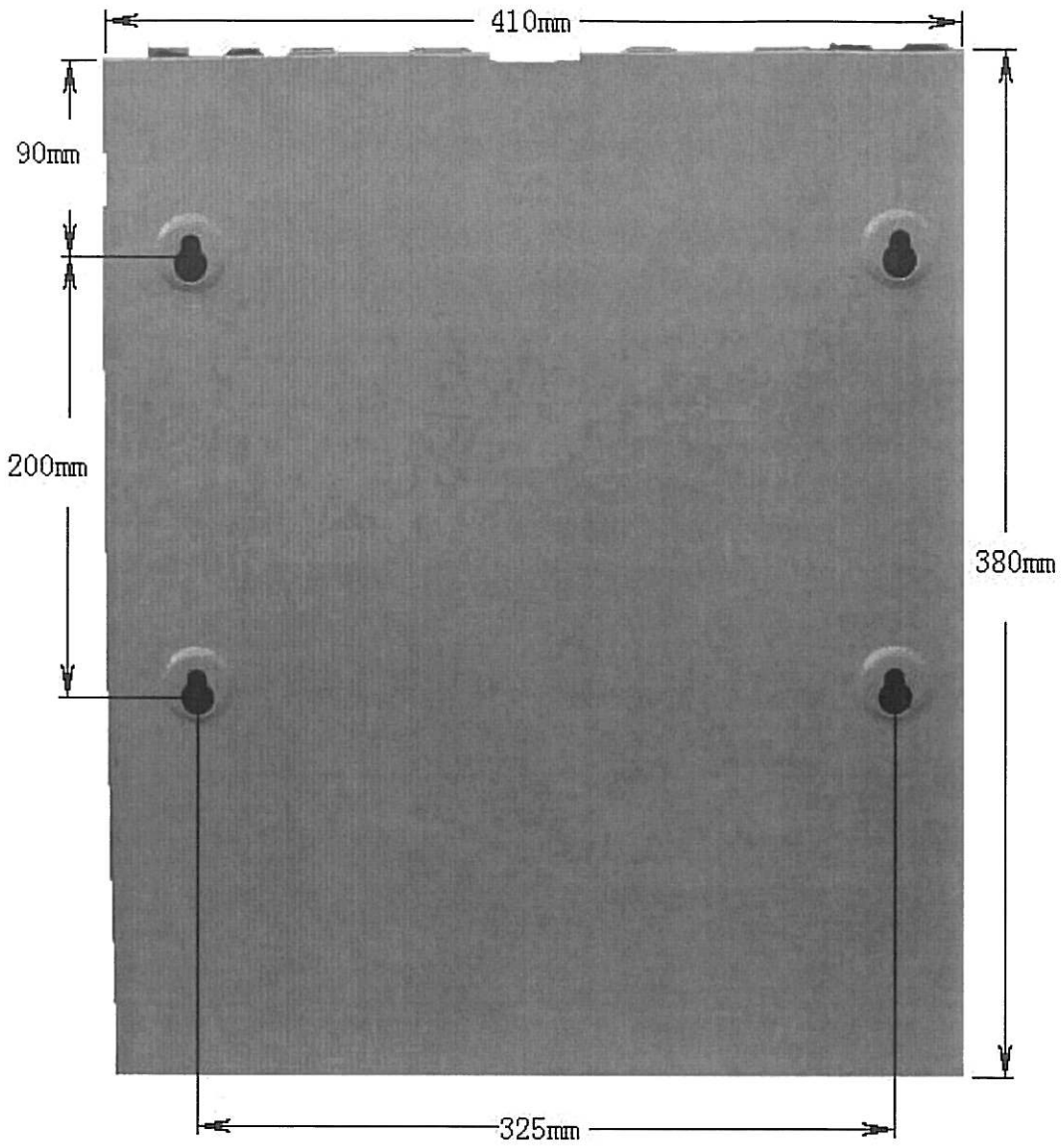
5.3 Wiring of battery

5.3.1 The 2 batteries should be mounted in the bottom of the box, fixed by a rack.

5.3.2 Series the 2 batteries by wire situated in the box (one end connect positive pole and another connect negative pole). Connect the wire marked *BAT+* to the positive pole of battery, and connect the wire marked *BAT-* to the negative pole of battery.

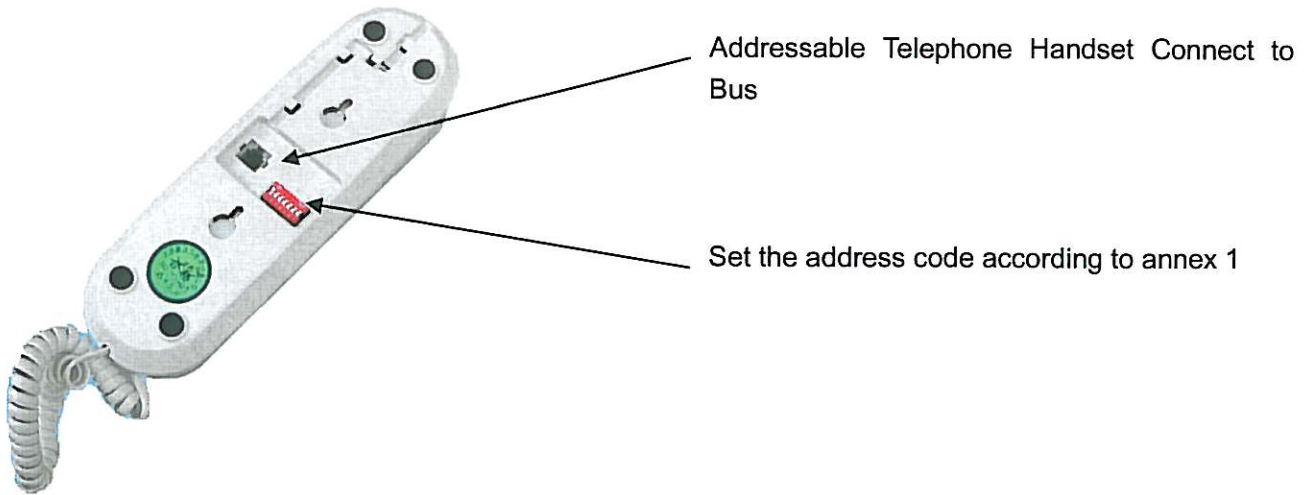


ADRESSABLE PREMIER FIREMAN TELEPHONE SYSTEM.

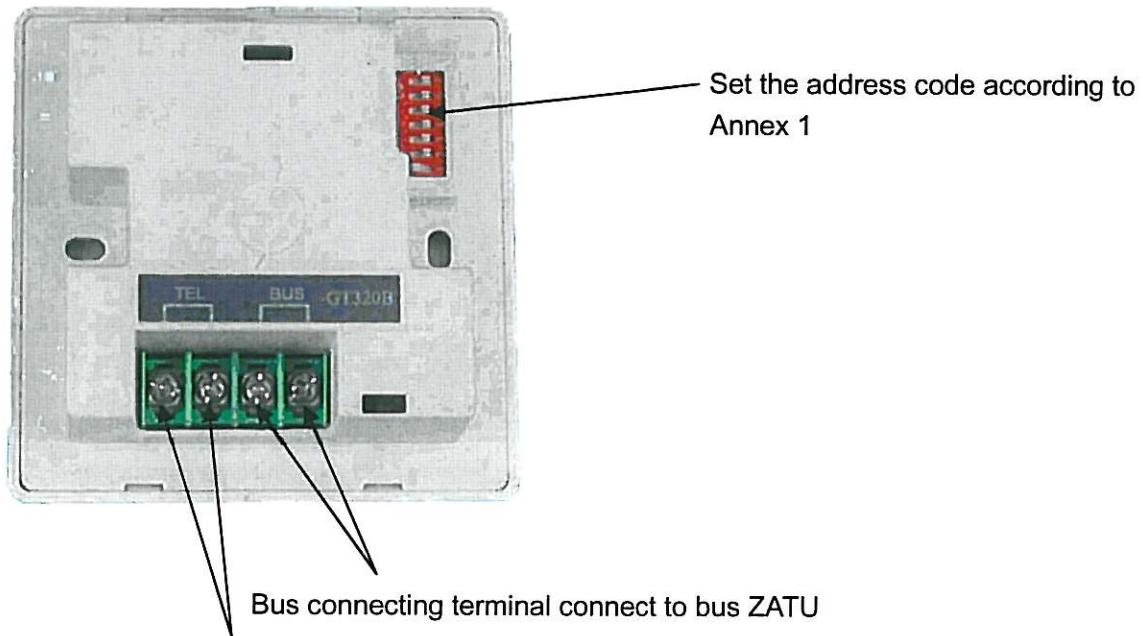


6 Wiring of extensions

6.1 ZATT Addressable Handset :



6.2 ZATS ADDRESSABLE TELEPHONE SOCKET

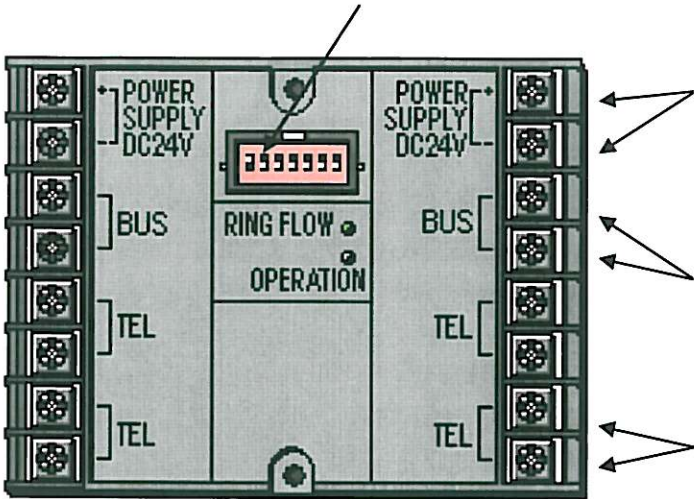


Terminal for telephone extension  
Connect ZTT, ZTS , ZHS Connect ZTT  
Telephone exchange cannot make ZTT ring  
If this function is required, please use ZATU

6.3 ZATU

Set the address code according to annex1

If the ZATU's are mounted more than 50M apart then an auxiliary power supply must be connected in to supplement power for ring tone. Can be connected from either left or right as they are both interconnecting



Bus connecting terminal can be connected from both left and right sides as they are both interconnecting

This can be called by the telephone exchange. The terminals marked TEL are interconnecting. The ring tone will be weakened when more than 3 ZTT's are connected at the same time.

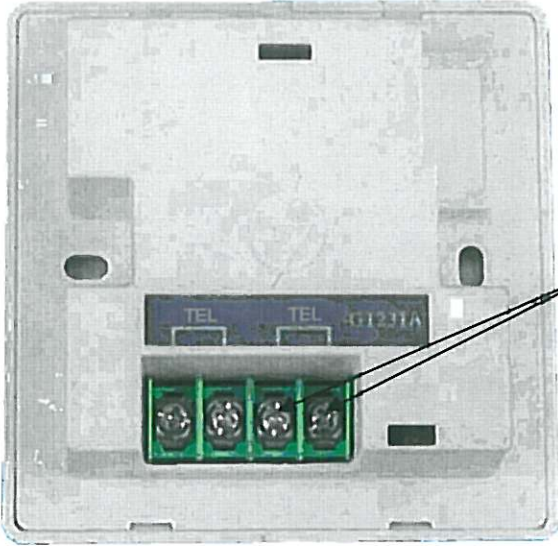
6.4 ZTT



Terminal for telephone line can be Connected to the `TEL` terminal of ZATU. The telephone exchange cannot call ZTT. Connect this terminal of ZATS.

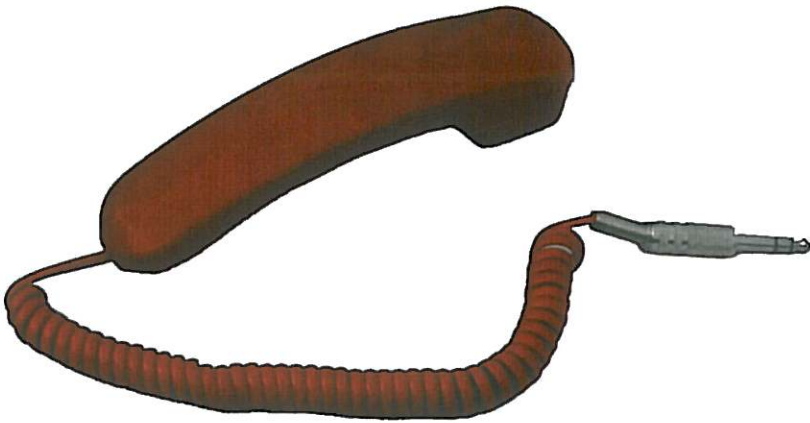


6.5 ZTS



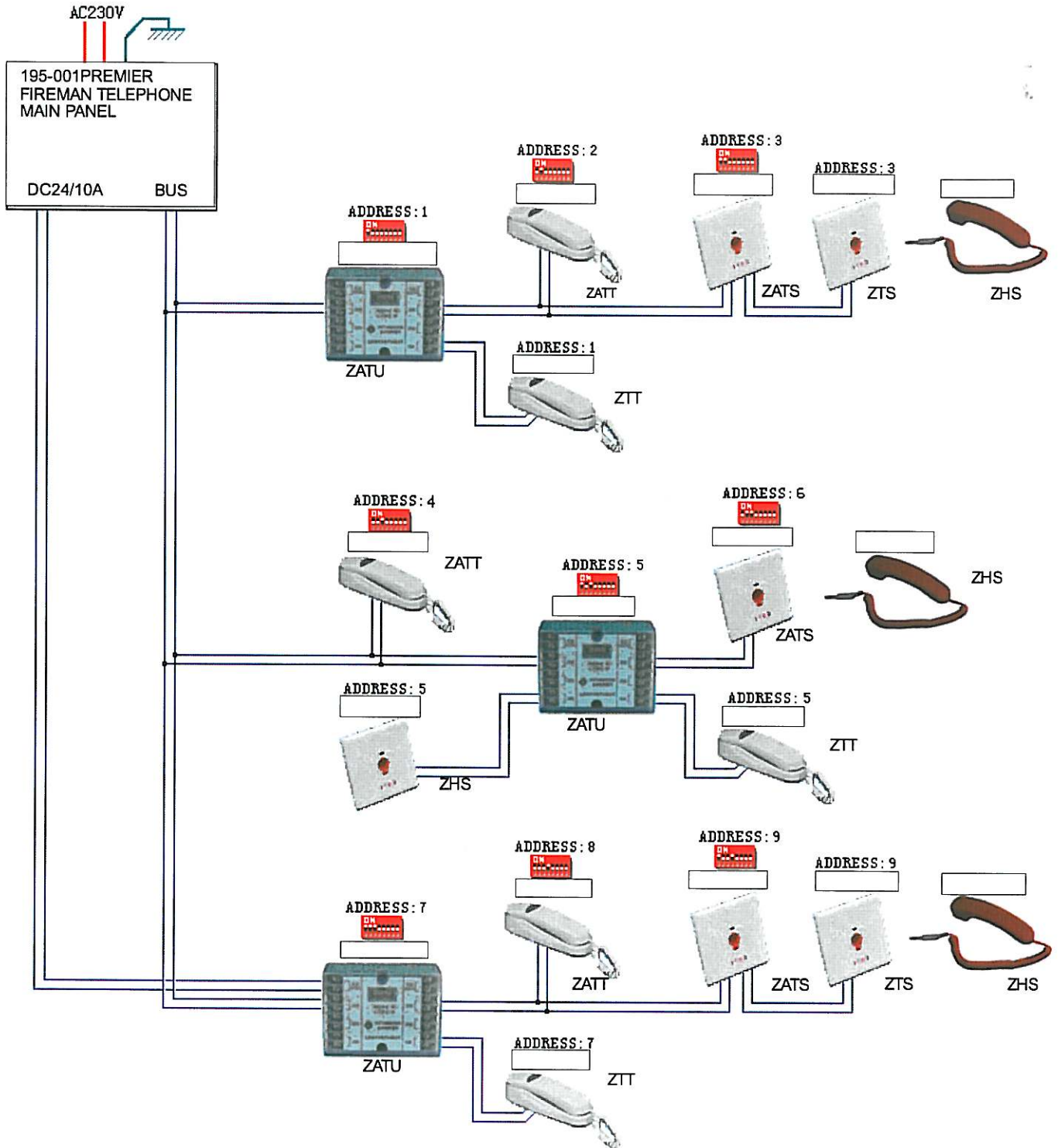
Terminal for telephone line can be connected to the TEL terminal of ZATU or ZATS The two "TEL" terminals are interconnecting.

6.6 ZHS



Inserting the jack in the socket of ZATS or ZTS will make the telephone exchange report a fire. This part can communicate with telephone exchange.

7 Wiring Diagram



6.5 The ZATU addressed 7 does not need to be connected to 24V DC. (Refer to the reason demonstrated in 6.3.)

6.6 The system can work properly even if the telephone exchange does not log in the address of extensions. But the exchange cannot report the fault of extensions.

8 Operation instructions:

- 8.1 Please make sure both main switch and standby switch of 195-001 panel are in 0 status (power supply
- 8.2 Connect the electric wire marked "BAT+" and "BAT-" to corresponding terminal of the 2 batteries according to marked polarities (series the 2 batteries).
- 8.3 Connect all the equipments according to above schematic diagram, and set correct address code for setting of other codes please see annex 1. Each piece of needs a separate address.
- 8.4 Connect all the power supplies in the following order: AC230V power supply, main power supply, standby power supply, and power supply of telephone main set.
- 8.5 Acoustic-optic components and external local phone line test:



LCD during test

- Press TEST key during standby status of the main set to enter acoustic-optic components test.
- All LCD characters flash, the indicator of operation and test on the front panel of main set light, other indicators flash.
- Press AUTOMATIC FIRE TELEPHONE key, main set send out code 117 to external local phone line, and re-press AUTOMATIC FIRE TELEPHONE or CANCEL key to cut off external line.
- Press TEST or CANCEL key to exit test.

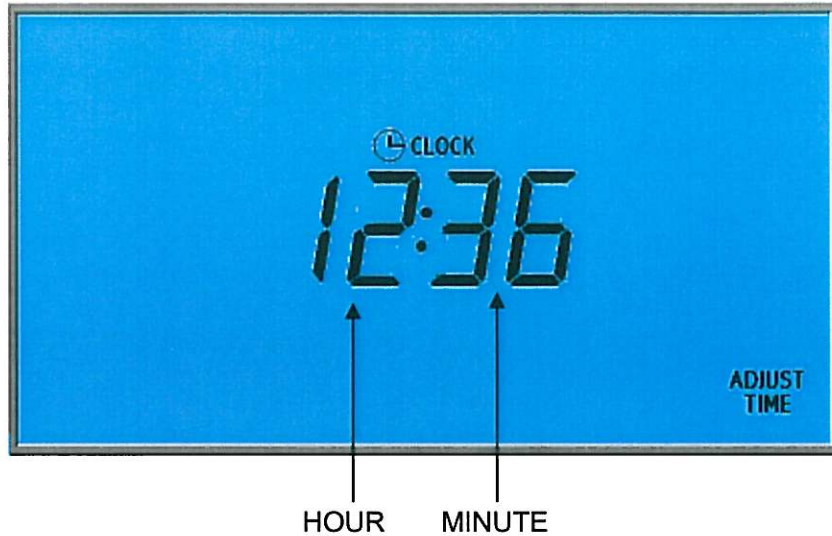
8.6 Date setting



Press keys in order of TEST, QUERY; digit of YEAR flashes

- Press ◀ or ▶ to change digit.
- Press QUERY to switch to next setting.
- Press QUERY for four times to switch to clock setting.
- Press CANCEL to enter clock setting.

8.7 Time adjustment :

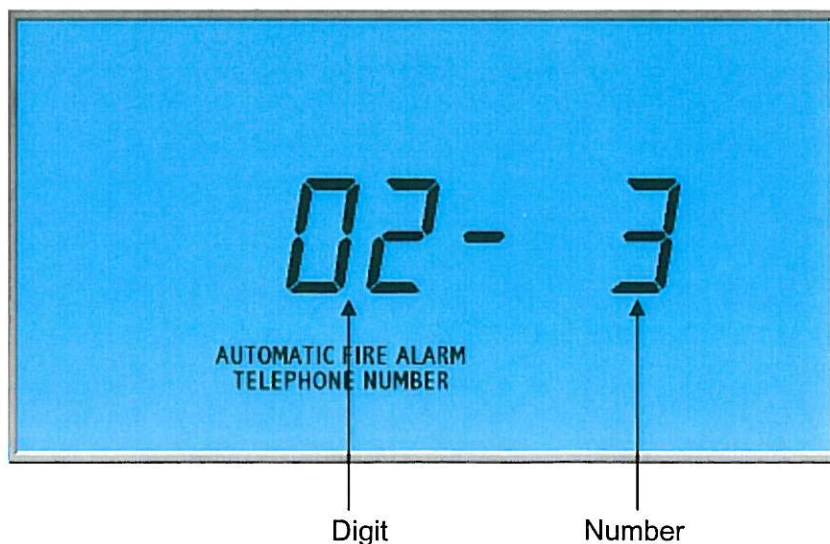


- After entering date setting, continuously press QUERY until clock setting is shown (as above).
- When HOUR digit flashes, press ◀ or ▶ to change digit.
- Press QUERY to switch to minute setting
- Press CANCEL to exit setting.

8.8 Real time display :

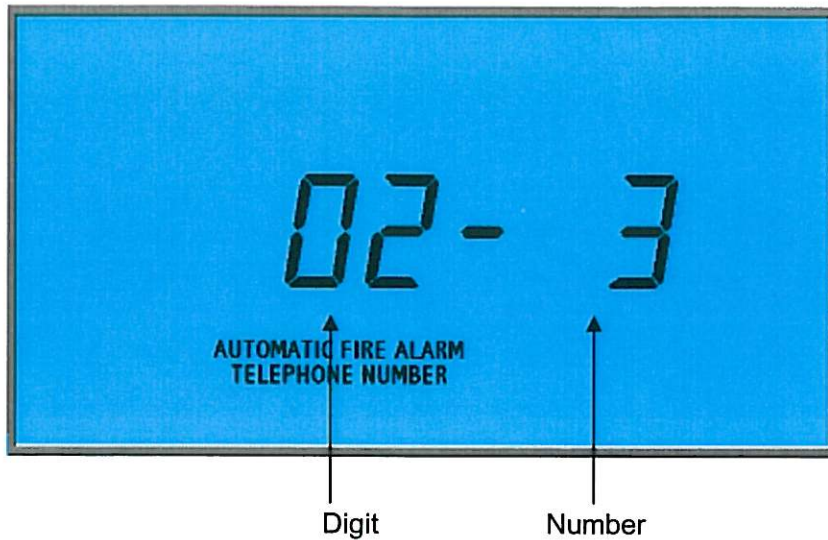
- Press ◀ or ▶ during standby status.
- Automatically exit.

8.9 Automatic fire alarm telephone number setting :



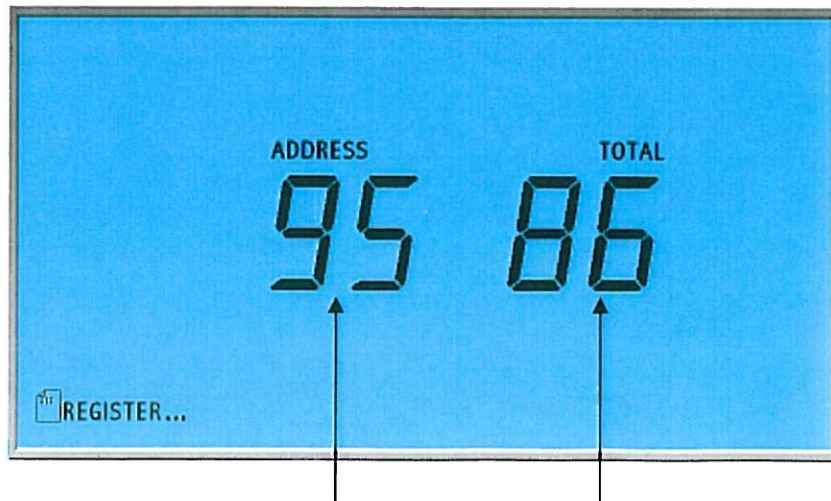
- Ex-factory setting is 119; to change the number please follow the instructions.
- Enter fire alarm telephone number setting by pressing keys in order of TEST, password, AUTOMATIC 119. (Password is 310, the following is the same)
- Digit displays number of digits of input number. Press number keys to input number, maximum digit is 14.
- When the first input number is 0, system acquiesces this number as internal transfer to external number.
- Press CALL to store number and exit setting; press CANCEL to eliminate this setting and exit.

8.10 Automatic fire alarm telephone number query :



- Enter fire alarm number query in order of TEST, password, AUTOMATIC FIRE TELEPHONE and QUERY.
- Digit displays number of digits of enquired number. Press ◀ or ▶ for forward or backward roll display.
- Press CANCEL to exit.

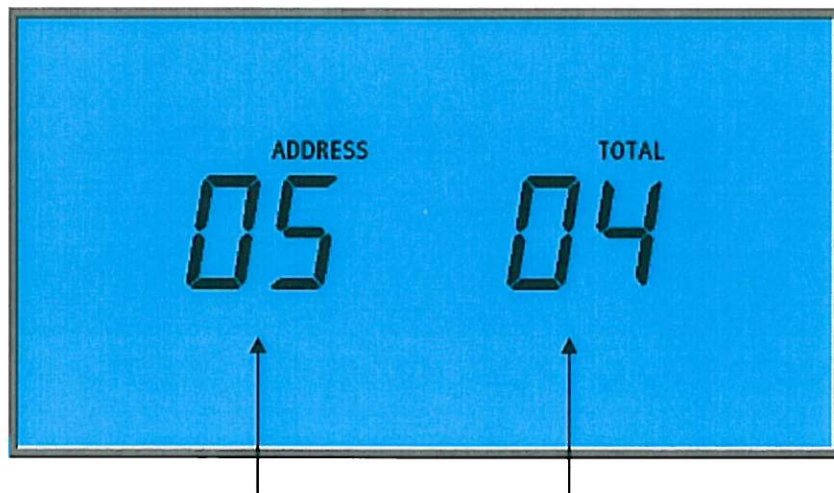
8.11 Online address log in (registration of equipments connected to bus)



Address of extension being located      Total number of extensions logged in

- Enter automatic log in by pressing keys in order of TEST, password, and CALL.
- Automatic exit on completion of log in.
- Press CANCEL to cancel, log in to current address before exit.
- Make enquiry of previous logins – press QUERY during standby status.
- For discrepancy from actual on-site operations, please check connection or make sure address setting is correct.
- While in this test mode the system will not accept an incoming emergency call Until completion of the test (approx 2 minutes).

#### 8.12 Query of login records :

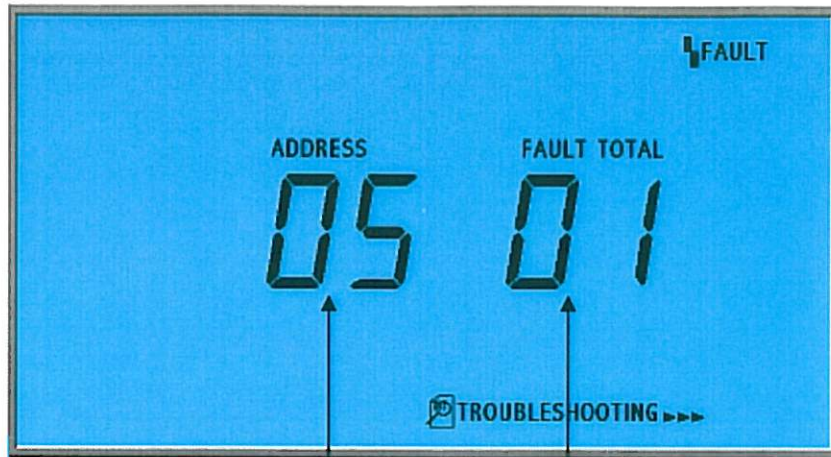


Address of extension on query      Total number of extensions logged in

- Enter login enquiry by pressing QUERY during standby status.
- Logged address automatically displayed in roll.
- Press ◀ key for forward display.
- Press ▶ key for backward display.
- Automatically exit after display is completed.
- Press CANCEL to exit.

#### 8.13 Automatic troubleshooting

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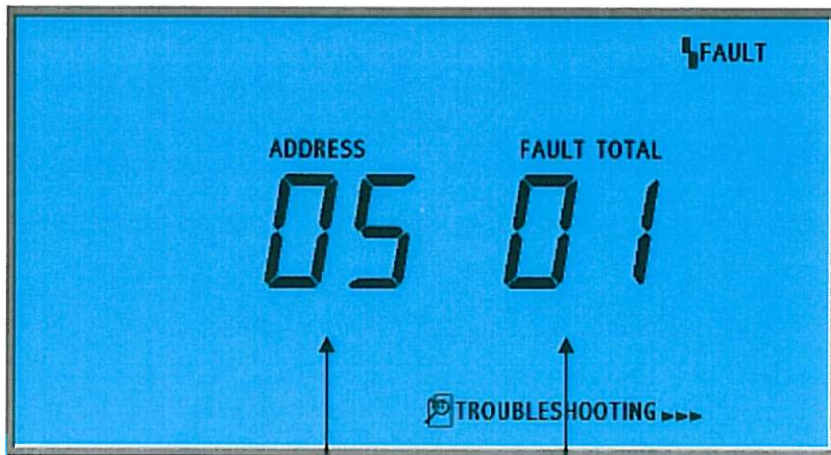


Address of extension on query

Number of faults that have been located

- Automatic troubleshooting (fault finding) is maintained continuously by the panel whilst in the standby condition.
  - ◆ Faults are indicated as per diagram above
  - ◆ For fault rectification see section 9 faults and resolutions.
- Automatic acoustic-optic troubleshooting activated upon location of any fault.

8.14. Fault query :



Fault address

Total number of faults

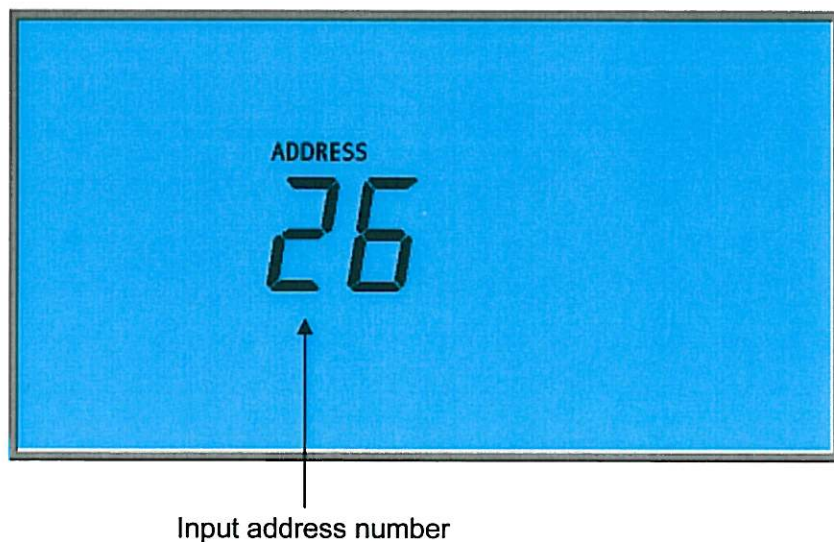
- In case of fault alarm, press QUERY to start fault query.
- Fault address automatically displayed in roll.
- Press ◀ or ▶ for forward or backward roll display.
- Automatic exit upon completion of display.
- Press CANCEL to exit.

8.15 External phone calls for main set :



- When there are external calls for main set (external call-in), main set alarm activated, EXTERNAL light flashes.
- Press EXTERNAL to connect with external line to start communications.
- Number keys may be operated to send out coding during phone call communications.
- Press CANCEL to hang up.

8.16 Input of extension address :



- Press number keys to input operated extension address number
- Main set will automatically extend display for 2 seconds.
- For valid input of address (any numbers from 1 to 95), main set is able to record the number automatically.
- When last operation or incoming address is your desired address number, input of this address may be omitted.

8.17 Main set calling extensions :

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Extension address called

Total number of called extensions

- Input extension address, and press CALL to call any extension.
- When multiple extensions are called, the called extension address is roll displayed by flashing, which can be viewed, by pressing ◀ or ▶ keys.
- Phone call automatically exits when an extension does not exist.
- When an address extension is in hang-up status, system will directly start Communications.
- Call exits when pressing CANCEL or calling duration of the address exceeds 1 minute.

8.18 Communications between main set and extensions :



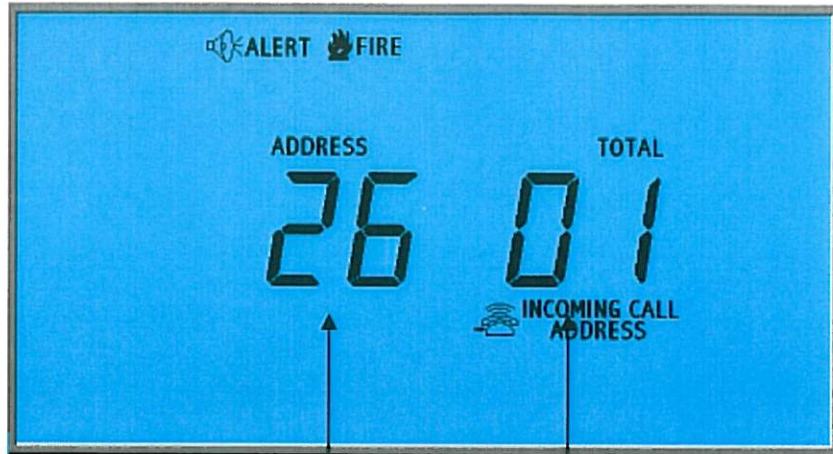
Extension address in communication

Total number of extensions in communication

- When main set calls an extension, pick up the handset for communications. Recorder starts recording automatically, and the indicator of fire alarm lights.
- In case of communications between main set and more than one extension, address of called extensions displayed in rolls, which may be viewed by pressing ◀ or ▶ keys.
- During display of the extension address (or after input of address), press CANCEL to stop communications between main set and the extension.
- During recording of communications, if the rest of storage space of the recorder is lower

than 10%, the indicator of FULL flashes and recording stops when there is not any spare storage.

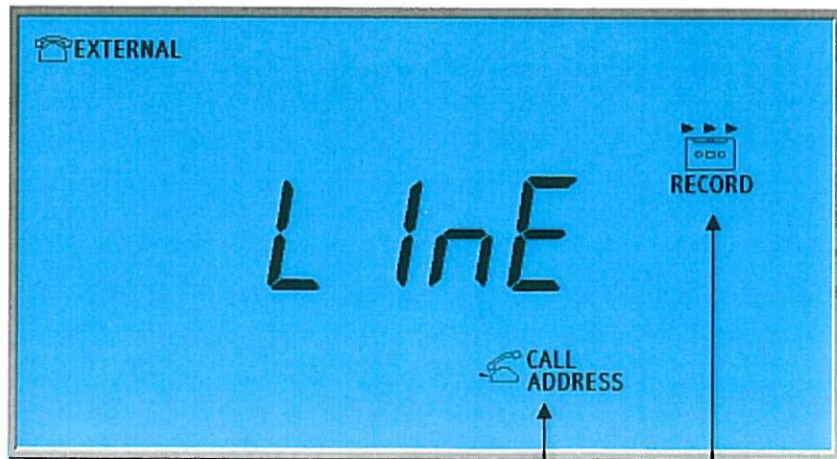
8.19 Extensions calling main set :



Extension address being called      Total number of extensions being called currently

- After handset of an extension is picked up or socket telephone extension is plugged in, main set acoustic-optic fire alarm starts as a fire warning.
- LCD shows address and total number of call-in extensions by flashing.
- In case of multiple extension call-ins, call-in extension address is displayed in roll, which may be viewed by pressing ◀ or ▶ keys.
- To connect with a call-in extension, press CALL, or input extension address and then Press CALL
- Press CANCEL to disconnect with a call-in extension, and disconnection signal is produced from this extension.

8.20 To make local external phone calls

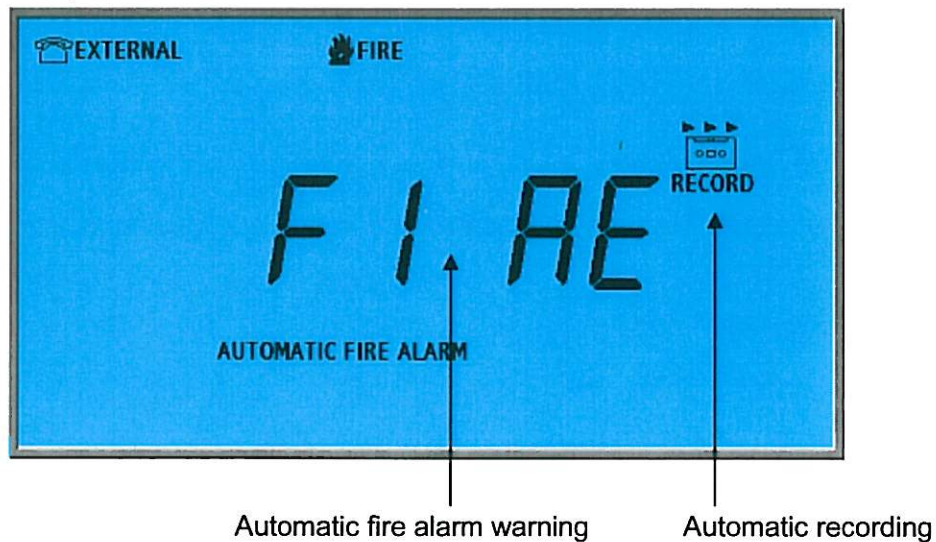


External line connected

Automatic recording

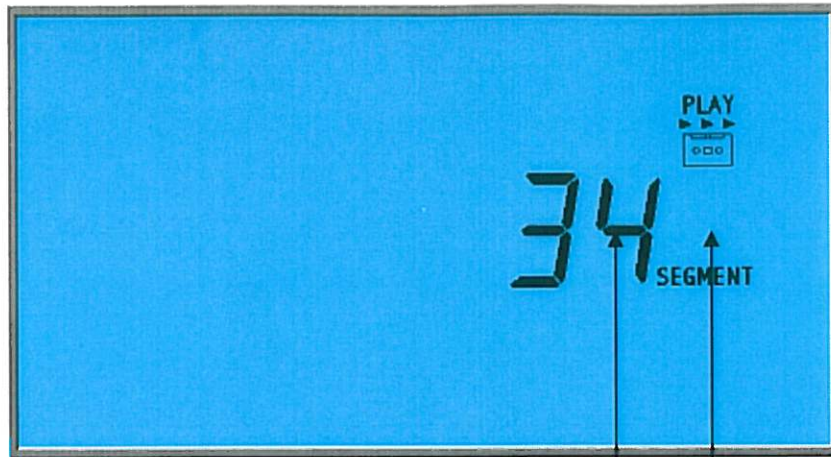
- Press EXTERNAL LINE, indicator of external line lights, and external line is connected.
- "LINE" is displayed and electronic recorder enters record status automatically.
- Press number keys to make external phone calls directly.
- Press EXTERNAL LINE or CANCEL to hang up upon completion of communications, then recording stops automatically.
- During external line communications, extensions cannot call in; therefore external phone calls are prohibited except for emergency situations.

#### 8.21 Dial automatic fire telephone alarm.



- Press AUTOMATIC FIRE TELEPHONE to connect with external line.
  - FIRE is displayed, and automatic recording becomes activated.
  - Main set makes automatic dialing of fire fighting number (please see automatic fire fighting number setting for details).
  - Press AUTOMATIC FIRE TELEPHONE or CANCEL to hang up upon completion of communications, then recording stops automatically.
  - During external line communications, status of main set is shown as BUSY for extensions.
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8.22 Recording of electronic recorder

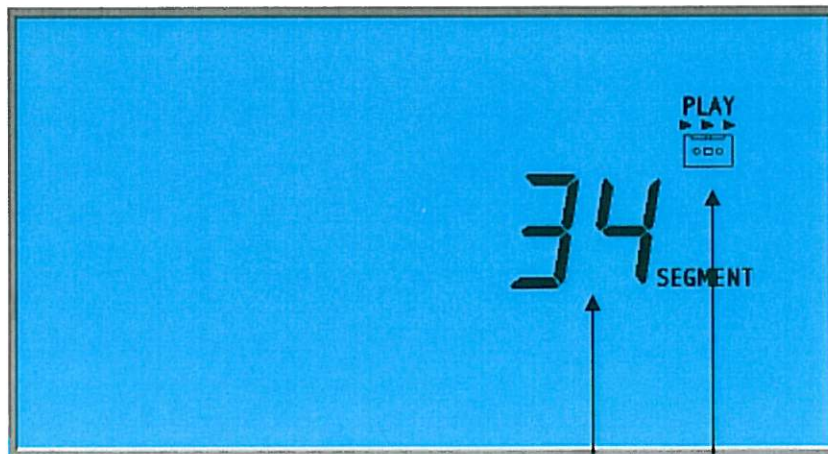


CURRENT RECORDING SEGMENT NUMBER

RECORDING STATUS

- During standby status of system, press RECORD to start recording; conversations through main handset may be recorded.
- During recording, when there is external line phone calls or incoming calls from any extension, recording stops automatically.
- Press STOP to exit recording.
- During recording of communications, if storage space of the recorder turns lower than 10%, indicator of FULL flashes, and recording stops when there is not any spare storage.

8.23 Play electronic recorder :



PLAYING RECORDED SEGMENT

PLAY STATUS

- During standby status of system, press PLAY to play recording, and LCD displays current broadcasting segment number.
- Electronic recording machine plays recordings of all segments in rotation.
- Press FORWARD or REWIND to find beginning or end of broadcast segment

#### 8.24 Deletion of recordings :

- Press TEST to enter test status.
- Press and hold on STOP key (for about 3 seconds) till pause of acoustic alarm, then all the recordings are deleted.
- Manufacturer is able to re-broadcast the recording even though recordings have been deleted – this is particularly important in analysis of fire incident.

#### 8.25 Conversation record query :

- Enter into communication record query by pressing keys in order of TEST, password and QUERY.
- Press ◀ or ▶ to make forward or backward display of recorded date, number, address, start time and stop time
- Press QUERY to refer to communication date of next recording.
- Automatic roll display of all recordings when any key is pressed, automatic exit when display finished.

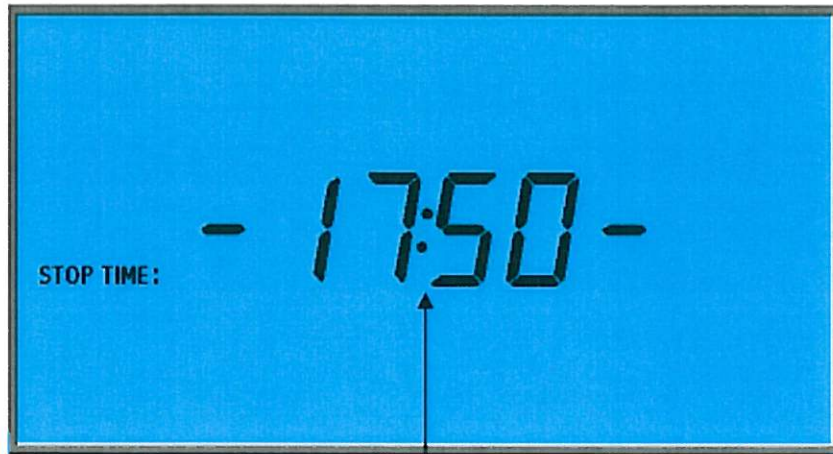


- Displays date of recorded communications on query.
  - Display of "00.00.00" means empty recording.
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START TIME OF COMMUNICATIONS

- Start time of recorded communications



STOP TIME OF COMMUNICATIONS

- Stop time of recorded communications

#### 8.26 Return to initial setting :

- Return to ex-factory setting by pressing keys in order of TEST, password and SILENCE ALARM.
- System completes the following settings automatically:
  - Troubleshooting back to initial status, and troubleshooting timer set as 0:0.
  - Automatic fire alarm telephone number set as 119.
  - Extension log In records and recorded communications erased
- Bus end output monocode as testing signal and main set is in troubleshooting status. Press any key and pause for 1 second to return to initial setting.

#### 9 Faults and resolutions :

9.1 Before installation and operation of this system, please read this manual carefully. If you have met the following problems during operation of this system, please take measures to resolve the issue. If faults

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are still left unsolved, please contact our company or our authorized technical service center. Do not repair the equipment by yourself so as to avoid deterioration of the problems.

9.2 LCD and work light does not work :

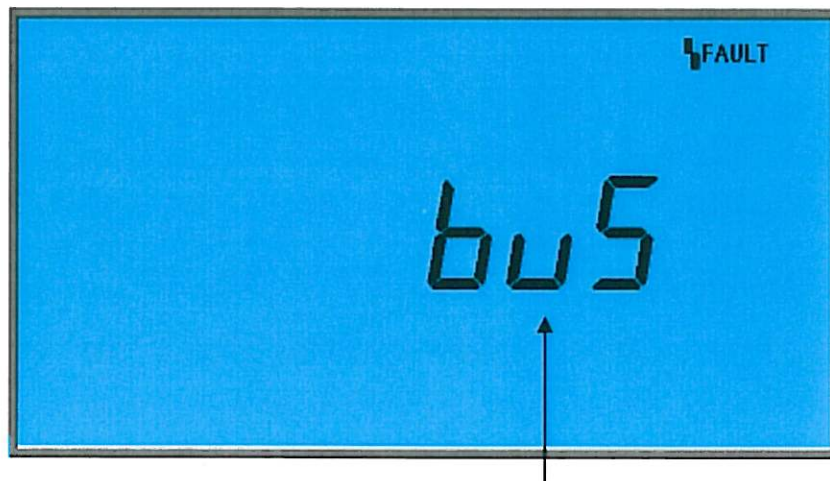
- Check if power supply of main set is turned on;
- Check if power supply electrode of DC24V main set is connected in a correctly
- Check if DC24V is transmitted from power supply.

9.3 External local phone calls can not be made :

- After EXTERNAL LINE is pressed to connect to the external line, there should be long signals from main set handset, otherwise external line connection fault exists;
- Check if external line is connected with main set correctly
- Check if external line is supplied with voltage of approx. DC48V.

9.4 Report of bus fault :

- Continual alarm with 1 second intervals, indicator of fault flashes, and LCD is shown as below:



BUS FAULT DISPLAY

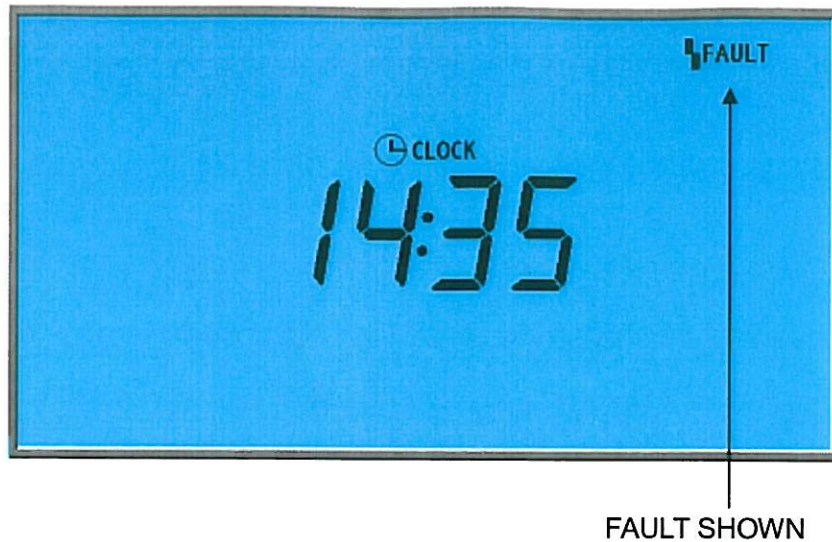
- Short circuit of bus, which shows there is short circuit in bus;
- Remove short circuit point after power supply of main set is cut off, after that normal state should be restored after main set is re-switched on.

9.5 Continuous dialing sound from handset :

- It is a normal state when main equipment is undergoing troubleshooting, in this case troubleshot address is shown on LCD;
- If this appears when there are calls, please check if the extension has been set to same address code.

9.6 Report of extension fault :

- Continual alarms with 1 second intervals, indicator of fault flashes, and general fault shown in LCD is as below:
-



- Press QUERY to check fault extension address (see system enquiry);
- Make sure that bus is well connected to the extension;
- When there is an alarm of extension fault in bus end, please make sure there is not any bus short circuit; since if there is an end short circuit, current may be unable to reach the degree which bus fault may be reported;
- After fault is eliminated, make sure the main set restored to normal state.

9.7 Automatically exit when main set is calling an extension :

- This is not a fault; instead it happens when main set fails to receive signals from the extension. Possible reasons include - the extension does not exist, or extension fault exists. In this case .

9.8 Loud noise during communications :

- Check if the earth end (housing) has been earthed;
- If the earth wire has been connected to main 230 AC earth loud feedback may occur.
- Check if power supply for main set meets the requirements of noise and ripple;
- Check if cable has been seperated from high voltage electric cable or other high electromagnetic noise sources; if noise cannot be removed due to environmental interference then use screened cable.



ADDRESSABLE PREMIER FIREMAN TELEPHONE SYSTEM.

Address	Code Setting							Address	Code Setting							Address	Code Setting							Address	Code Setting						
	1	2	3	4	5	6	7		1	2	3	4	5	6	7		1	2	3	4	5	6	7		1	2	3	4	5	6	7
01	1	0	0	0	0	0	0	26	0	1	0	1	1	0	0	51	1	1	0	0	1	1	0	76	0	0	1	1	0	0	1
02	0	1	0	0	0	0	0	27	1	1	0	1	1	0	0	52	0	0	1	0	1	1	0	77	1	0	1	1	0	0	1
03	1	1	0	0	0	0	0	28	0	0	1	1	1	0	0	53	1	0	1	0	1	1	0	78	0	1	1	1	0	0	1
04	0	0	1	0	0	0	0	29	1	0	1	1	1	0	0	54	0	1	1	0	1	1	0	79	1	1	1	1	0	0	1
05	1	0	1	0	0	0	0	30	0	1	1	1	1	0	0	55	1	1	1	0	1	1	0	80	0	0	0	0	1	0	1
06	0	1	1	0	0	0	0	31	1	1	1	1	1	0	0	56	0	0	0	1	1	1	0	81	1	0	0	0	1	0	1
07	1	1	1	0	0	0	0	32	0	0	0	0	0	1	0	57	1	0	0	1	1	1	0	82	0	1	0	0	1	0	1
08	0	0	0	1	0	0	0	33	1	0	0	0	0	1	0	58	0	1	0	1	1	1	0	83	1	1	0	0	1	0	1
09	1	0	0	1	0	0	0	34	0	1	0	0	0	1	0	59	1	1	0	1	1	1	0	84	0	0	1	0	1	0	1
10	0	1	0	1	0	0	0	35	1	1	0	0	0	1	0	60	0	0	1	1	1	1	0	85	1	0	1	0	1	0	1
11	1	1	0	1	0	0	0	36	0	0	1	0	0	1	0	61	1	0	1	1	1	1	0	86	0	1	1	0	1	0	1
12	0	0	1	1	0	0	0	37	1	0	1	0	0	1	0	62	0	1	1	1	1	1	0	87	1	1	1	0	1	0	1
13	1	0	1	1	0	0	0	38	0	1	1	0	0	1	0	63	1	1	1	1	1	1	0	88	0	0	0	1	1	0	1
14	0	1	1	1	0	0	0	39	1	1	1	0	0	1	0	64	0	0	0	0	0	0	1	89	1	0	0	1	1	0	1
15	1	1	1	1	0	0	0	40	0	0	0	1	0	1	0	65	1	0	0	0	0	0	1	90	0	1	0	1	1	0	1
16	0	0	0	0	1	0	0	41	1	0	0	1	0	1	0	66	0	1	0	0	0	0	1	91	1	1	0	1	1	0	1
17	1	0	0	0	1	0	0	42	0	1	0	1	0	1	0	67	1	1	0	0	0	0	1	92	0	0	1	1	1	0	1
18	0	1	0	0	1	0	0	43	1	1	0	1	0	1	0	68	0	0	1	0	0	0	1	93	1	0	1	1	1	0	1
19	1	1	0	0	1	0	0	44	0	0	1	1	0	1	0	69	1	0	1	0	0	0	1	94	0	1	1	1	1	0	1
20	0	0	1	0	1	0	0	45	1	0	1	1	0	1	0	70	0	1	1	0	0	0	1	95	1	1	1	1	1	0	1
21	1	0	1	0	1	0	0	46	0	1	1	1	0	1	0	71	1	1	1	0	0	0	1								
22	0	1	1	0	1	0	0	47	1	1	1	1	0	1	0	72	0	0	0	1	0	0	1								
23	1	1	1	0	1	0	0	48	0	0	0	0	1	1	0	73	1	0	0	1	0	0	1								
24	0	0	0	1	1	0	0	49	1	0	0	0	1	1	0	74	0	1	0	1	0	0	1								
25	1	0	0	1	1	0	0	50	0	1	0	0	1	1	0	75	1	1	0	1	0	0	1								

Note: In columns of code setting, 1 shows position of switch at the place of ON; 0 shows position of switch at the place of OFF.