



Installation Manual

VIVID32

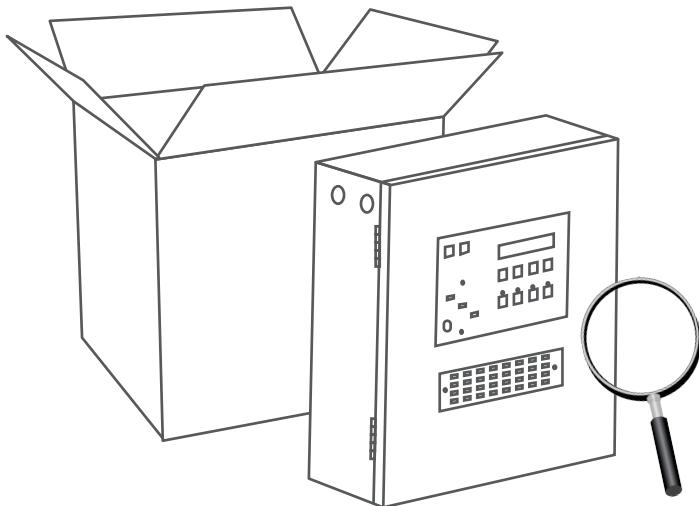
HORING LIH INDUSTRIAL CO., LTD.

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1 Transportation Inspection

V/32

- Please check all packaging and components for damage before starting the assembly and installation work.
- Do not assemble or install visibly damaged components!

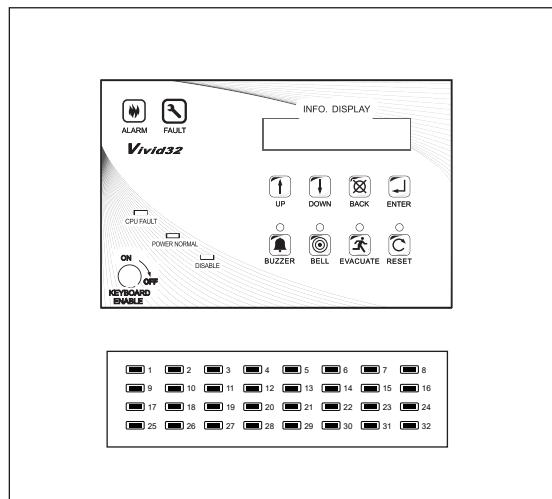


2 Assembly and Installation Information

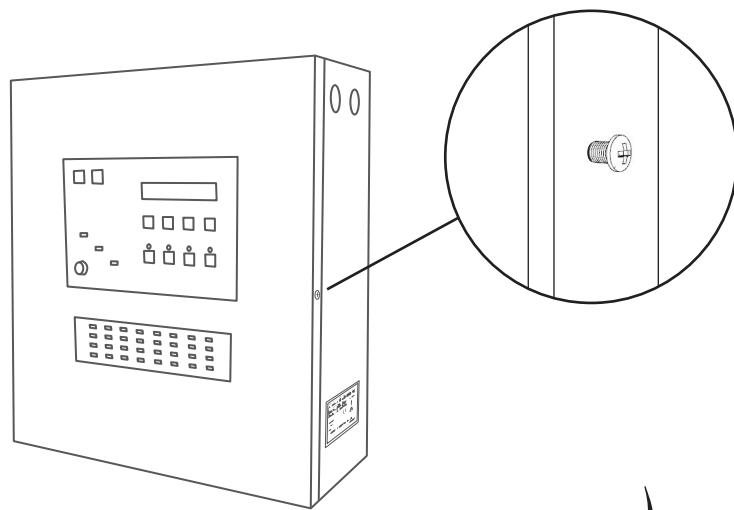
- Assembly and installation can only be performed by professional technical specialists!
- The FACP can only be installed in a dry, clean, well-lit, and restricted-access area.
- Must use the appropriate installation materials (self-tapping screws) to install the FACP to a flat surface, and ensuring there is no mechanical tension.
- The FACP should only be operated when it is properly mounted on a wall or a flat surface with adequate load-bearing capacity.
- Must avoid high voltage, strong electromagnetic fields, and mechanical impacts.
- Do not install the FACP near fluorescent lamps, high-voltage cables, or on unstable, vibrating surfaces.
- To ensure product safety, only approved cables that comply with IEC 60332-1-2, IEC 60332-1-3, or IEC/TS 60695-11-21 standards should be lead into the device housing.
- The Cable Grips used must meet a flammability rating of V-1 or above.
- For wall-mounted installations, the FACP should be installed at a height between 80cm to 180cm from the standing position of the operator.
- Before installing, please disconnect all power sources to the FACP.

3 Vivid32 Dimensions

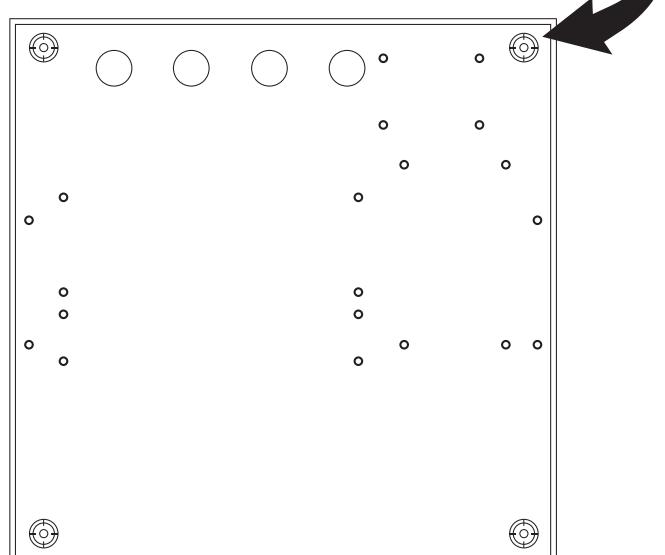
V/32



- Assembly and Installation Information



- Remove the screws.



The FACP must be installed to the wall so that the operator can clearly see the display and operate. For example, a height of 1.5 meters is the optimal position.

The FACP is designed to be installed to the wall through self-tapping screws.

It is recommended not to install near heat sources (such as radiators).

Additionally, if the FACP must be installed on a wall adjacent to a corner, the minimum distance from the corner must be at least 20 cm to ensure the panel can be opened properly.

4 Technical Specifications

V/32



Power supply voltage	100V AC~240V AC 50/60 Hz
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Power supply Fuse (from PCB 09112-7 F1)	2A
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Output voltage	27V(nominal) 17-27.8V
Maximum output ripple	2%



Imax a (as per EN54-4)	1.182A @ 8Zone 1.335A @ 32Zone
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Imax b (as per EN54-4)	2.549A @ 8Zone 3.652A @ 32Zone the maximum current drain on the battery should the primary supply fail.
Imin	182mA @ 8Zone 335mA @ 32Zone

Batteries (lead-acid)	2 x 12 V 7Ah, NP7-12(YUASA) or 4 x 6 V 4Ah, NP4-6(YUASA) or equivalent with UL94-V1 flame class enclosure or higher
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The maximum current drawn from the battery by the PSE when the main power source is disconnected	4.4A
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DC Power fuse (from PCB 09112-6 F1)	5A
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Batteries Fuse (from PCB 09112-6 F2)	5A
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Battery charger Maximum voltage charge adapted to temperature	1A
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Maximum internal resistance of battery (R _i Max)	0.5Ohm
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Battery shutdown voltage	19.0V
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Single Zone

Voltage	24V DC
Terminal Resistor	4.7KΩ
Maximum sensor's connection (Smoke Detector)	30
Manual Call Point Resistance	220Ω/1W

**Area Sounding/ Alarm**

Voltage	24V DC
Maximum Supply Current	1A
Terminal Resistor	4.7KΩ

Relay Output

Maximum Voltage	250V AC/30V DC
Maximum Supply Current	1A

AUX & 24V Output Voltage

Voltage	24V DC
Maximum Supply Current	1A

Connecting Cable

Cable's Semi-Diameter	1.5mm ²
Maximum Supply Current	2A

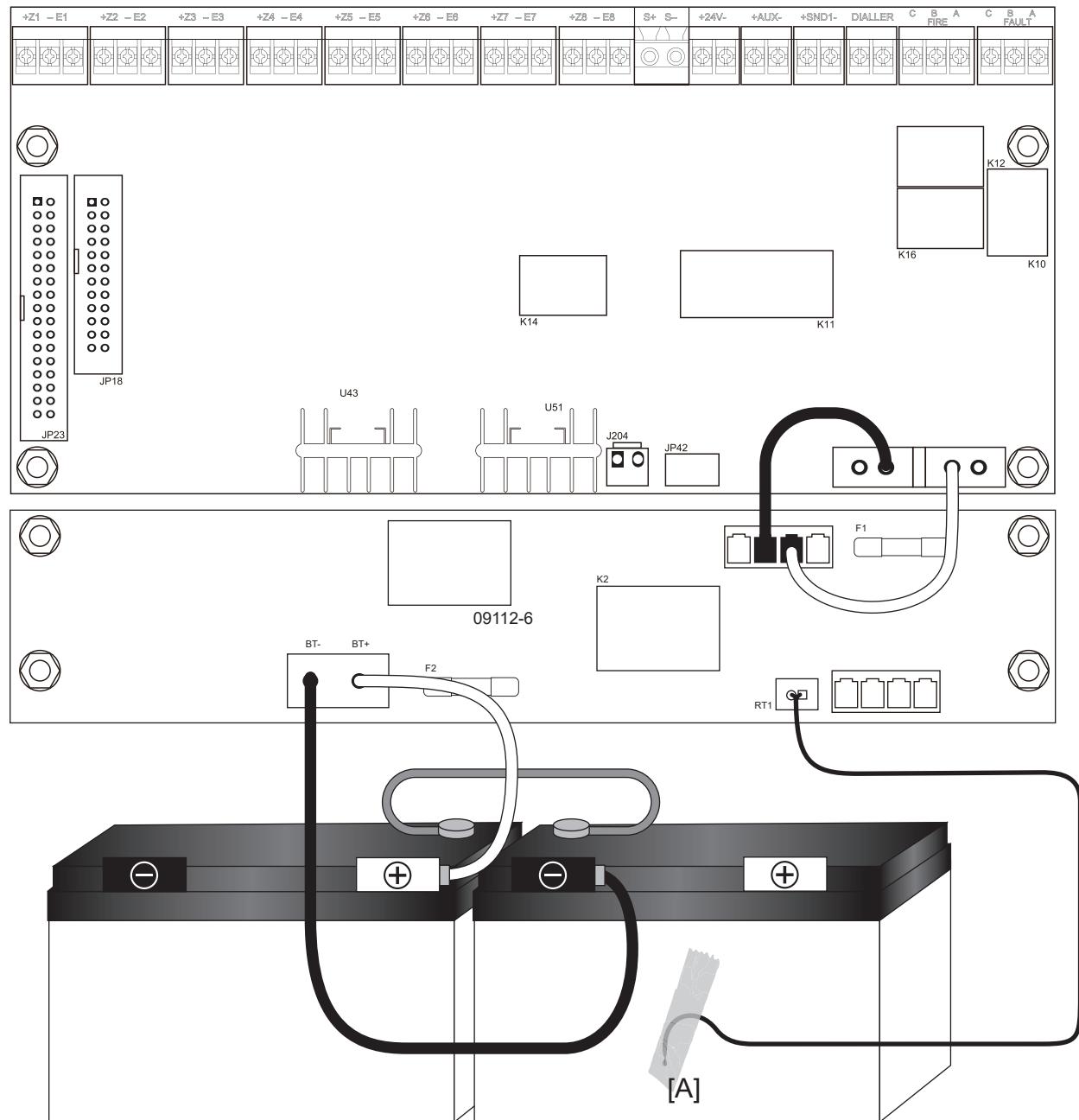
Environmental

Operating Temperature	-7°C ~ +45°C
Storage Temperature	-10°C~ +70°C
Operating Humidity	Up to 85%, non-condensing
Enclosure Protection Class	IP30

Standard

Fire Alarm Control Panel	EN54-2
Power Source	EN54-4
Instruction Policy (Design, Install, Plan , Usage....)	EN54-14

5 Batteries Installation



The thermal probe must be positioned on the side of the battery and held in place by a strip of tape ([A]).

The microprocessor of the FACP regularly checks the status of the main AC power supply source, batteries, and recharging circuit.

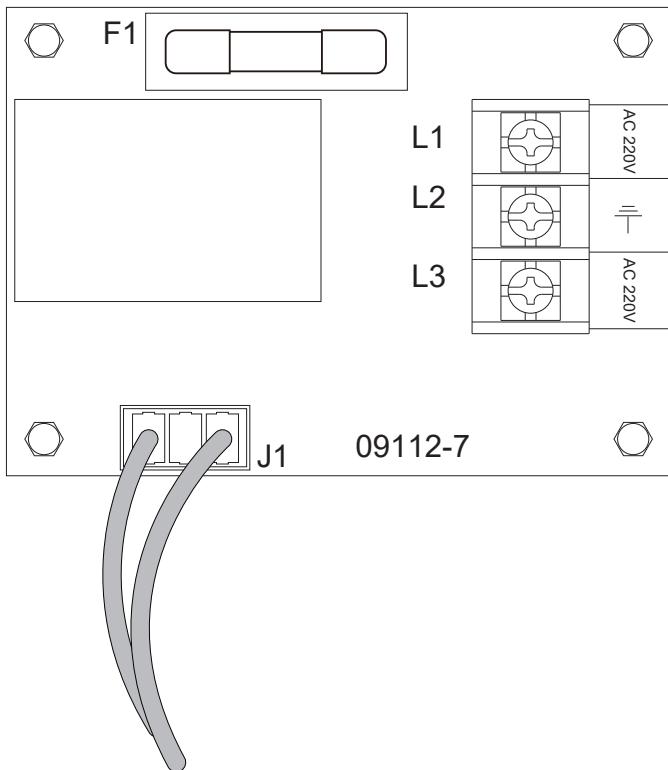
When AC mains fails, the FACP will automatically switch on the backup battery source.

When operating on AC power, the microprocessor controls the battery charger output.

When the FACP operates on battery power (without AC power), a "Low Battery" fault will be indicated when the voltage is < 22.8V.

To prevent irreversible damage, the voltage will be automatically switched off by disconnecting the batteries when the voltage is < 19V.

5.1 Mains and Batteries connection

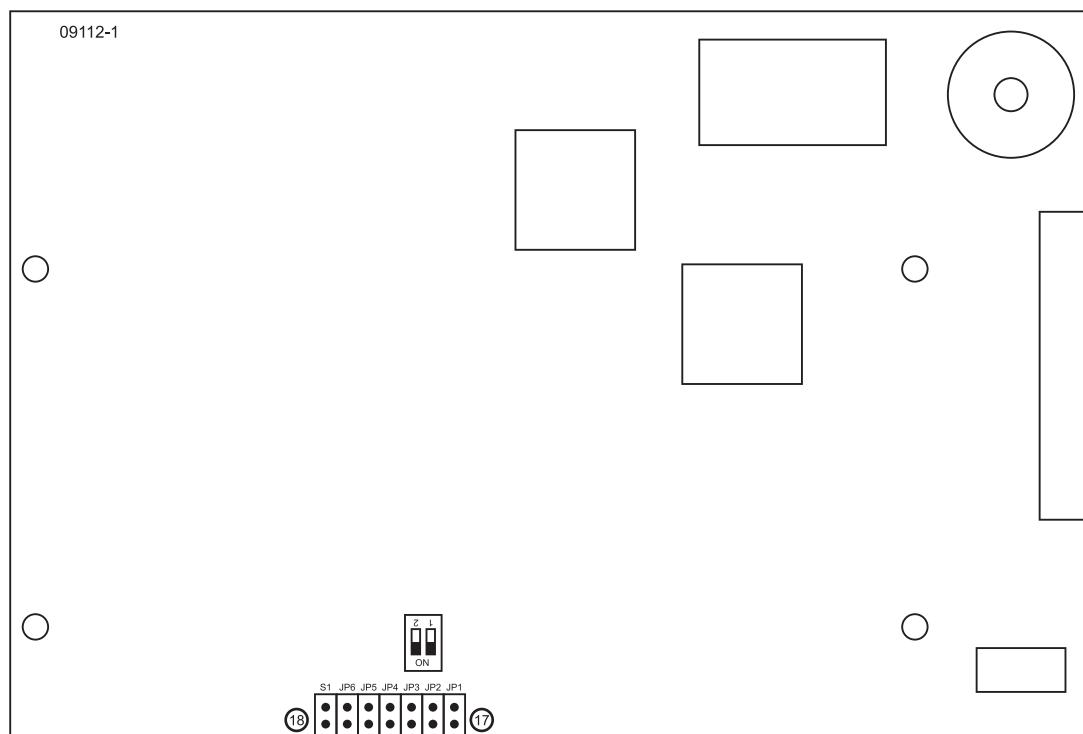


The connection to the 100~240VAC power supply must be used through three-conductor cable (phase-neutral-Ground).

1. Turn off the AC main power switch.
2. Connect the power cable.
3. Turn on the main power switch.
4. Install and connect the batteries as instructed in this manual.
Once the FACP has been powered on, it will start operating automatically.
However, it is necessary to wait some hours until the batteries are completely recharged according to the battery storage.
5. Check the LED indicators on the FACP according to the "User Manual."
6. JUMP Set-up (Access Level 4)

6 JUMP Set-up (Access Level 4)

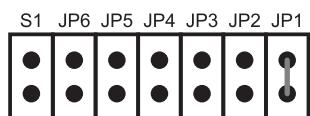
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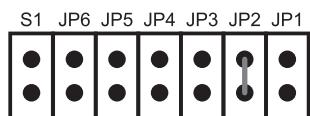
1. Zone Number Set-up (JP1,JP2,JP3,JP4,JP5,JP6): The Z1 ~ Z32 circuit is set in binary jumper. After setting, press "RESET" switch to update the zone number.

For example:

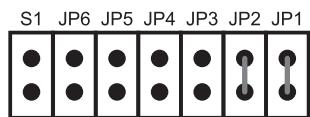
1. Z1 Set-up: JP1 Short; JP2,JP3,JP4,JP5 and JP6 Open



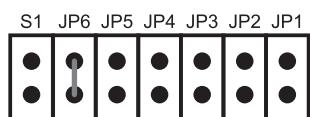
2. Z2 Set-up: JP2 Short; JP1,JP3,JP4,JP5 and JP6 Open

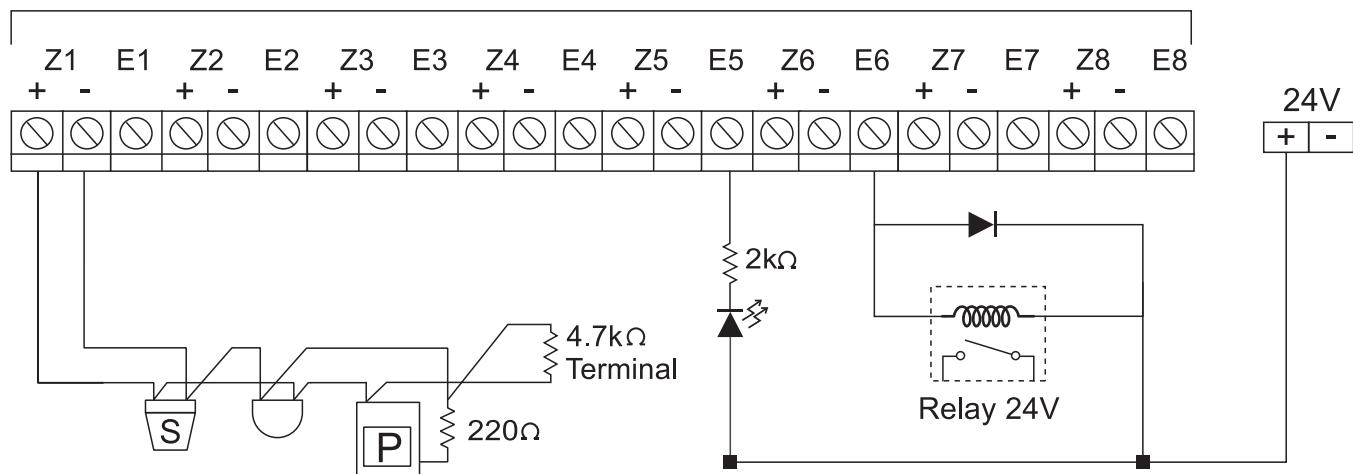


3. Z3 Set-up: JP1 and JP2 Short; JP3,JP4,JP5 and JP6 Open

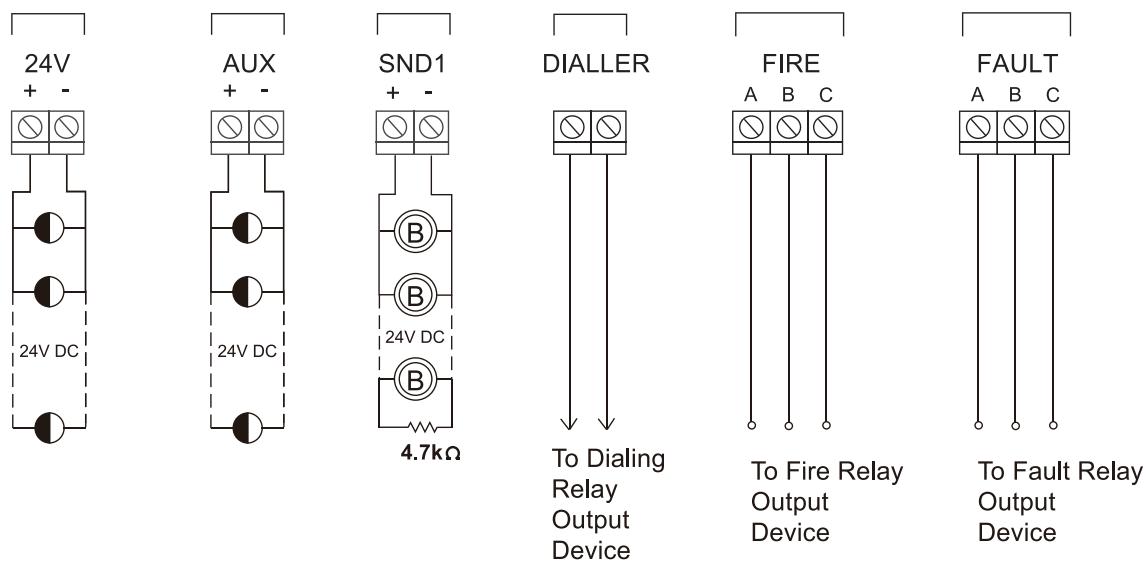


4. Z32 Set-up: JP6 Short; JP1,JP2,JP3,JP4 and JP5 Open



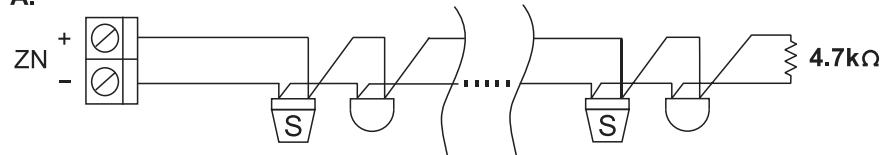


Indicating Lamp 24Vdc Output Sounder Dialler Output Fire Relay Output Fault Relay Output



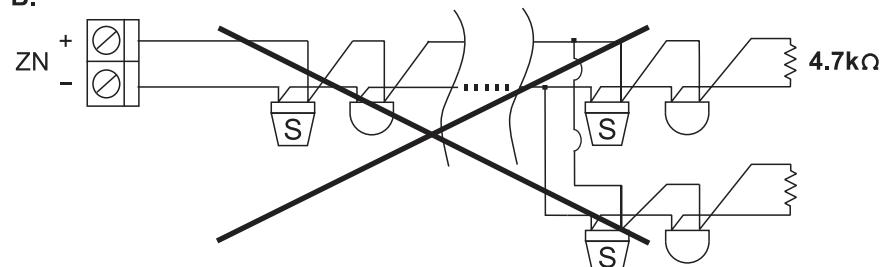
6.2 Zone Wiring:

A.

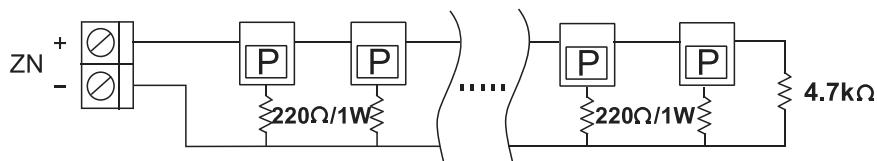


Wiring Diagram A is a recommended connection. The maximum number of connected smoke detectors is 30 for each zone (not including the mechanic-type heat detectors.)

B.

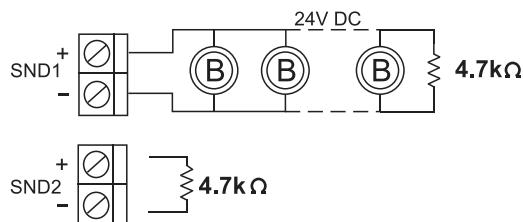


Wiring Diagram B is an improperly connected one. Do not connect a detector or an end of resistor with another detector in parallel way.



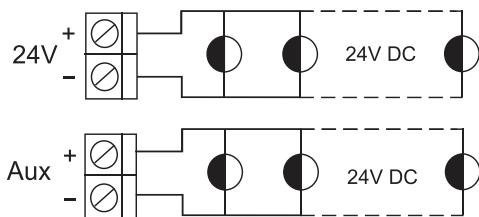
Wiring Diagram C .When connecting a manual call point to a zone, please use a 220 Ohm resistor and install the 4.7K ohm end of line resistor.

6.3 Alarm Bell Wiring:



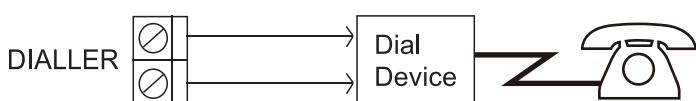
Fire alarm control panel is equipped with two sets of Area Bells contacts. When connecting one set of bell contacts, please be sure to connect the end of resistor to avoid bell malfunction. Please install the 4.7K ohm resistor across the unused bell contacts as well.

6.4 24V DC Output Wiring:



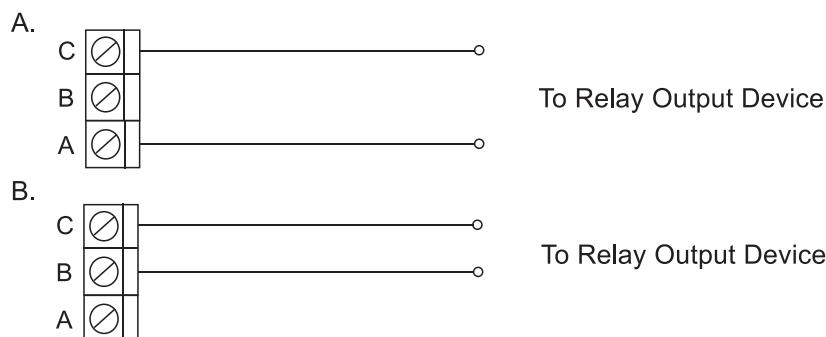
The contacts marked "24V" are controlled by the reset switch but the contacts marked "AUX" are not. When connecting the indicating lamp to the contacts, please connect the red wire to the "+" and the black wire to the "-" contact at the same time.

6.5 Dialler Relay Output Wiring:



The contact is connected with NO. and COM. When there is a fire alarm, the signal will go through the telephone line.

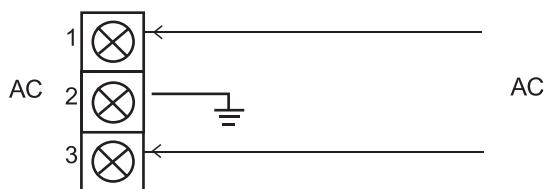
6.6 Fire/Fault Relay Output Contacts:



In picture A shows N.O. connection.

In picture B shows N.C. connection.

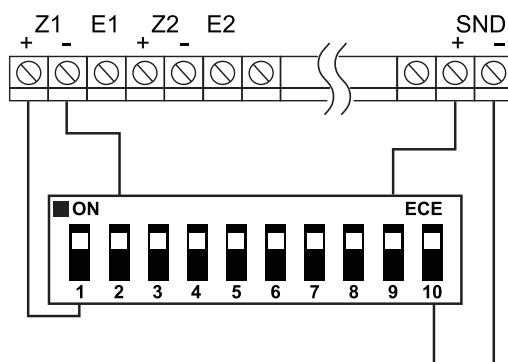
6.7 AC Power Connection:



Connect the AC power supply wires to contacts 1 and 3.

Connect the ground wire to contact 2.

6.8 Dip-switch instruction(non-compliance with EN54-2)



OFF: Set the switch to OFF when the loop has connected to devices.
(including detector or sounder).

ON: Set the switch to ON and loop will be setted with internal end-of-line resistor when disconnect device (including detector or sounder).

1~8: It is the place to set internal end-of-line resistor for detector (Z1~Z8).

9: It is the place to set internal end-of-line resistor for sounder.

10: PCB link detection setting.

For example:

- 1: 8 Zones (PCB*1) Set the switch to ON for 1st PCB.
- 2: 16 Zones (PCB*2) Set the switch to ON for 2nd PCB. Set the switch to OFF for 1st PCB.
- 3: 24 Zones (PCB*3) Set the switch to ON for 3rd PCB. Set the switch to OFF for 1st & 2nd PCB.
- 4: 32 Zones (PCB*4) Set the switch to ON for 4th PCB. Set the switch to OFF for 1st & 2nd & 3rd PCB.



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Ver.B