



ASES Security Pvt. Ltd.

FIRE ALARM SYSTEM

Model : PRECISION
(6 to 48 Zones)

E.R.T.L., (North) Tested as per IS : 2189/1999



Known for Absolute Reliability... Sold All Over India and Abroad...

INSTRUCTION MANUAL



We ASES a leading manufacturer of Fire Alarm Systems, Fire Rated Doors, Fire Pump Control Panels, Emergency Lights, PA/VA Systems etc.

With a sound infrastructure we manufacture wide range of Control Panels that are used by several institutions.

Our sustaining effort in delivering quality control panels establish us as a trust worthy supplier amongst our client. The speciality of our production is to fabricate customized products as per requirement of clients.

ASES under the guidance of our Managing Director **Mr. Anoop Jaiswal** has grown at a fast pace over the years and has established as Industry leader.

INTRODUCTION

From the very beginning we are committed to safeguard the home, property and lives. As society is moving towards the modernization, our priority is to secure it by using latest technology in the field of safety & security products. Company has taken the responsibility of Fire Detection & Alarm System by using Hi-Tech superior technologies.

ABOUT THE COMPANY

We proud to introduce ourselves, as “**ASES Security Pvt. Ltd.** (Brand name: **Agni Suraksha**)” a well known name in the field of Fire Alarm System. We are in this field from last 20 years. We have reached the remarkable height because of our professionalism and best qualities of our products. We have our own R & D department for Researching Technologies, Programming & Quality Control Assurance.

Now a days, **ASES** is one of the most popular brand in the market. **ASES** is continuously appointing Dealers, Authorized System Integrator all over India. For more information about our product range you can visit our website **www.asesindia.com**

- There are wide ranges of our products according to the requirement of customer.
- We manufacture Conventional as well as Addressable Fire Detection & Alarm Systems.

ABOUT THE PRODUCT

ASES is very proud of to introduce **PRECISION** the completely digital microprocessor based panel in Indian fire industry by using the digital technology. PRECISION can give you accuracy in its performance. For the ease of user there are 16 x 2 character LCD display in the panel by which situation can be visually identify as well as LED. indications are also available. There are control switches in front of panel for handling ZONE ISOLATE, ALARM ACKNOWLEDGE, LAMP TEST AND RESET. There are LED display for MAINS ON, SYSTEM ON, LOW BATT, FIRE, CHARGER ON and Fault conditions in the panel.

The double door technology makes it enable not to handle by unauthorized persons, there are two other switches available for RESET and SILENCE externally.

The size & look of this panel is designed by our Engineers keeping in mind that even a single thing not to disturb attraction of the location.

ASES hope the satisfaction from user of this panel.

This instruction manual will guide you to understand your system well.

FEATURES:

1. Fully confirms IS 2189
2. Operates on 230 V AC, 50 Hz AC supply
3. Battery backup with built in charger
4. Fire / fault status in unambiguous colored LED indications.
5. 16 x 2 line dot matrix LCD display
6. External s/w for Reset, Silence, Lamp test, Evacuate.
7. LED indication for zone wise fire, Open, Short, Zone isolation.
8. External s/w to test each zone fire, open, short status manually.
9. Relay O/P for actuators.
10. Mains on, System On visual LED indications.
11. Battery Low, Fuse Blown, AC Fail LED indications.
12. Flashing window indication for fire & fault.
13. 6 to 48 zones expandable facility.
14. Extra potential free contacts for fire and fault.
15. RS-485 communication facility for External repeater/slave panels (Optional).
16. Auto dialer attachable facility.
17. Enough inside space for battery.
18. Attachable with all types of fire detectors.
19. Rugged CRCA with powder coating fire proof body.

MECHANICAL CONSTRUCTION

The enclosure of the Panel is constructed by CRCA sheet with powder coated finish. The 20mm knock outs are given for cable entry at the top of the cabinet . The panel also has a built in battery provision to accommodate 2 Nos. of 12v, 7Ah batteries.

The front side of the panel consists of the following:

- a. Tactile switches.
- b. LED indications
- c. 16X2 line dot matrix LCD
- d. Fire & Fault annunciation window.

INSTALLATION AND COMMISSIONING:

INSTALLATION

The installation of the fire detection and alarm should comply with:

- a. The Institute of Electrical Engineers (IEE) wiring regulation.
- b. The Indian Standard of Fire Detection and Alarm for building.
- c. The installation cable should not be in the area of proximity of high voltage cable or induce electrical interference. Place the panel in its mounting position and fix the panel to the wall using the slots of the four screws. Ensure the enclosure and the inner parts of the panel are given sufficient protection during installation period. All external cables are to be entered via the 20mm preformed knockouts located at the top of the panel. When the installation of all the cables has been completed, clean the interior of the enclosure ensuring all masonry debris and drilling swords are removed.

COMMISSIONING

Check the all entered wiring is correctly identified and also check the cables are free from fault conditions by a multimeter. Connect the external wiring into their respective terminals and ensure the End Of Line (EOL) resistor is placed at the last device of circuit.

Prior to the initial power up of the panel, conduct the following preliminary checks:

- a. Check for any external signs of damage caused during installation
- b. Check all the PCBs are secure in its monitoring position
- c. Check the cables are secure and correctly connected.
- d. Check all the cable termination is tight & secure.
- e. Connect the batteries ensuring the correct polarity.

All damages/faults must be rectified before proceeding

Switch ON the Panel. During this period the following LED's have to glow to ensure system is in healthy condition.

A. SYSTEM ON

B. MAINS ON

Note: Apart from the above green LED's if any other amber or red LED is ON, it is indicating respective fire or faults. Rectify the fire or faults before proceeding to any other operation.

In normal condition LCD will show the following lines :

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All Zones Normal

SYSTEM OPERATION

1. Green Power LED : A green LED shall normally be on indicating that the system is receiving AC electrical power. A failure of control panel shall cause the LED to off.

2. Yellow Trouble LED : A yellow "Trouble LED shall be in on condition along with audible sounder (Buzzer) sound when any trouble is detected in the system.

A trouble signal may be acknowledge by operating the "SILENCE" switch, this shall silence the panel trouble sounder.

3. Red Fire LED : A red LED shall be in on condition when fire is detected by the system and sounder will give a audio indication.

4. Low Battery Indication : In case of low battery a yellow LED will light & show the indication of low battery.

5. LCD Indication (Optional):

- a) A written text "Zone Normal" will be shown by the LCD in normal condition, zone normal state for these are no any abnormality in any zone as short, fire or open.
- b) Shorting Indication : If there will be shorting in any zone it will be indicated by the LCD as "short in zone 1.
- c) Open line Indication : In case of opening in detector line a message will indicate as open condition. e.y. opening in zone 1, it will show "Open in zone 1".

TECHNICAL DATA

Panel Operating Condition Operating Voltage

AC Power	: 220v AC, 50Hz \pm 10%
Standby	: 24v DC
Operating Temperature	: 0°C to 50°C
Operating Humidity	: 95% (non-condensing)

Zone Operating Condition

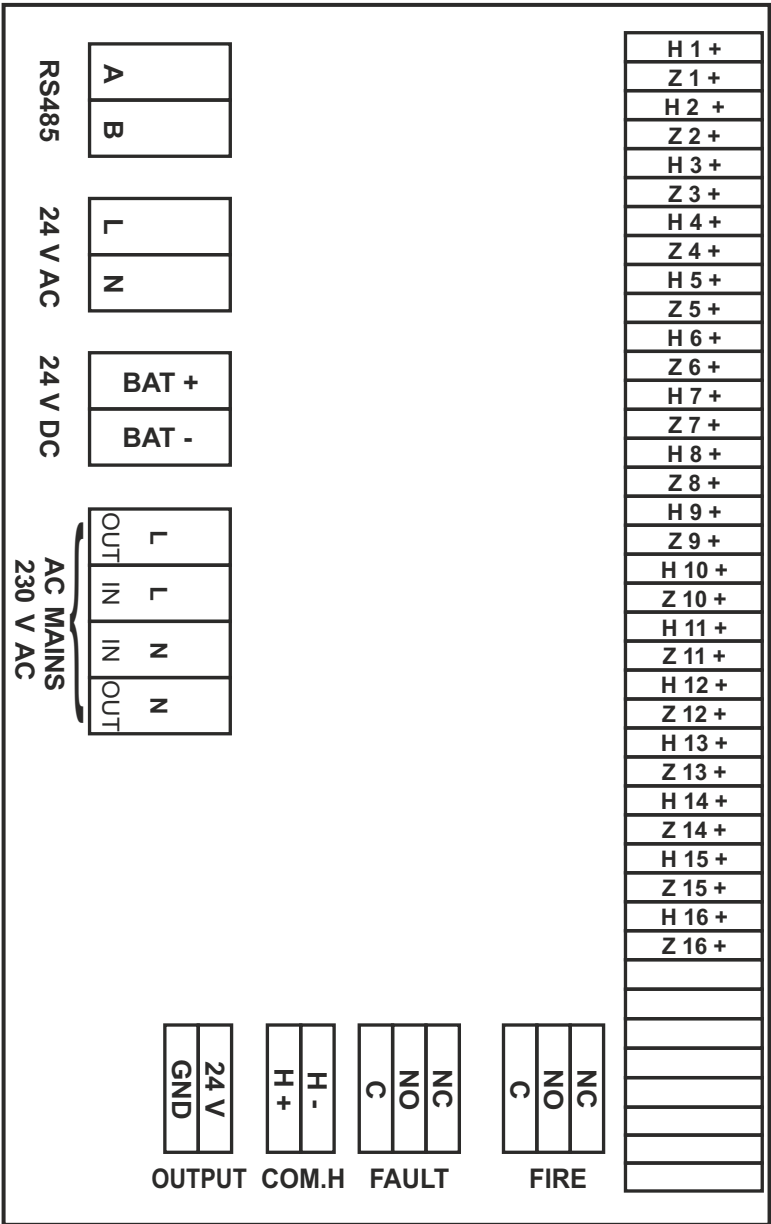
Normal Loop Voltage	: 23v DC
Open Threshold Current	: 4.4 mA
Short Threshold Current	: 35 mA
Fire Threshold Current	: 15 – 35 mA
Alarm Outputs Hooter Output	: 0.75A (24v DC) (Normal)

NB: Hooter output current can be increased as per customer requirement.

Remote Outputs

Fire Contact1 (C, NO, NC)	: 120v AC @ 1A/ 24v DC@ 2A
Fault Contact (C, NO, NC)	: 120v AC @ 1A/ 24v DC@ 2A
Zone Wise Contact Potential Free (C, NO, NC)	: 120V AC @ 1A/ 24v DC@ 2A

CONNECTION DIAGRAM:



TESTING & SETTING

For testing the system you should check but it all the functions as listed below

1 System On :- For system on green LED will glow as well A.C. main on green LED will glow. It means AC supply is continues.

2 LCD Display :- LCD should indicate zone normal. It means there is not any abnormality in the system and all the accessories attaching with the panel is working properly.

3. Evacuate :- This is a facility to detect the fire manually. If some one find fire then he should press the switch evacuate then it will be an audio indication of fire by the sounders.

4. Silence :- Silence Switch is used for make silent the sounders.

5. Reset :- Reset is used to restart the system with checking all the conditions.

SERVICING I FAULT FINDING

If you have any problem read this user manual again & check the center measure for each symptoms listed below:

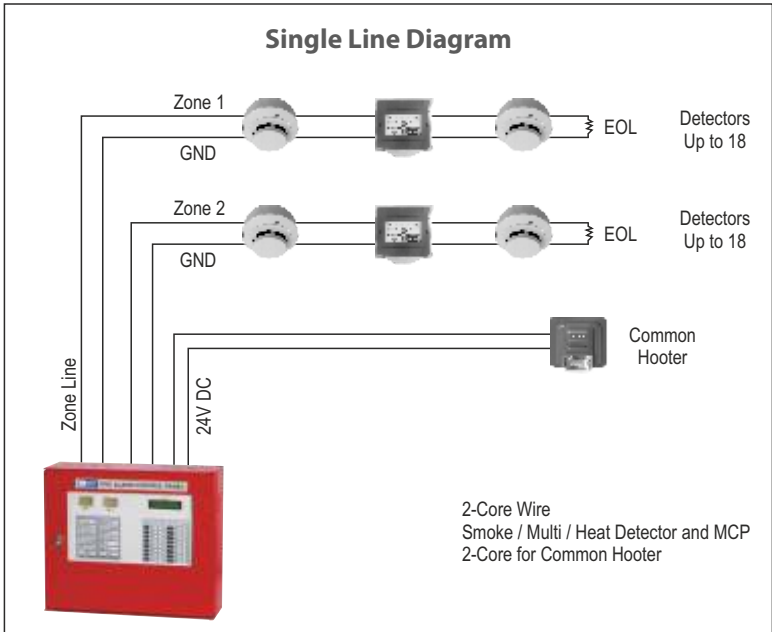
If the problem persists, record down your system number from the warranty card and call us or e-mail asesmail@asesindia.com

- | | | |
|---|---|---|
| Symptoms | : | Counter measure |
| 1) System dead | : | Power Plug insertion A.C. connection at appropriate place |
| | : | Power ON - Off Switch Ok. |
| | : | Fuse OK |
| 2) System not functioning on battery | : | Proper connection of battery |
| | : | Proper joint of battery |
| | : | Fuse Ok. |
| 3) Key pad not functioning | : | System connection (inside) open |
| 4) LCD not functioning | : | System connectoer (inside) open |
| 5) Zone trouble | : | Wrong connection |
| | : | Zone line open / short |
| | : | Check EOL |
| 6) Hooter trouble | : | Hooter line short / open |
| | : | Wrong connection |
| 7) During Fire : | | |
| (a) Abnormal functioning | : | Check hooter line |
| (b) Fuse Blown | : | Supply Voltage abnormal |

PRECAUTIONS

There are some precautions in Installation & Operating the system as below :-

1. All the connection should be done properly.
2. Battery should be connect with the right polarity.
3. Before connection Hooter & Detector wire you should check shorting if there is any shorting in Hooter or Detector line it may harmful to the system.
4. Body ground (A.C. Supply) should not be with Mother Board ground for any region.
5. Detector should be installed & connected in right manner.
6. There should not be much variation in A.C. Supply.



DO'S & DON'T:

DO'S:

- * The panel and detectors should be within the temperature range of 0°C to 50°C.
- * We strongly recommends you to check the panel on daily basis and the detectors on weekly basis.
- * Ensure 230 10% voltage input level before switching ON the Panel. If the voltage fluctuation is more than 10% use UPS supply or voltage stabilizer.

DON'T:

- * Don't fix the panel/ detector in high range of vibrating area
- * Don't put the panel cables near to the high voltage area
- * Don't fix the panel in highly moisture surrounded area
- * Don't connect the power cable wrongly, this will brake the warranty

WARRANTY CERTIFICATE

Dear Customer,

Your **ASES Security Pvt. Ltd.**, Fire Alarm System is guaranteed against manufacturing defects of parts and components for a period of 12 months from the date of purchase (During this period any items found defective will be repaired at works or through service center.

Terms & Conditions:

1. CPU sticker seal should not be broken.
2. Serial No. Sticker should not be tampered/loss or mismatch our company record.

Serial No.:

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Stamp:

ASES Security Pvt. Ltd.

WARNING!
C.P.U STICKER BROKEN, TAMPERED, MISMATCHED
STRICTLY BOUNDED, OTHERWISE COMPANY DOES
NOT TAKE ANY RESPONSIBILITY.

FIRE ALARM HOOTER / STROBE



Hooter Low Intensive (H-M.S.-II)



Electrical Siren (SR-1KM)



Hooter with Flasher (H-M.S.-III)



Hooter with Strobe (H-ABS-V)



Hooter ABS Body (H-ABS-II)



Speaker ABS Body (H-ABS-III)

- Extra Hi-Intensive sound (upto 120dB)
- Tested by ERTL as per IS : 2189
- Best uses in sound polluted areas
- Available in three different tones
- Available in electrical operation
- Hooter with strobe type flasher
- Fire Alarm in new attractive look
- Different colors are available
- Connector is plug in type
- Different tones are available
- Suitable for Malls, Restaurants, Banks etc
- Used in sound polluted sites like factories etc

ASES Security Pvt. Ltd.

EXIT
Exit-Emergency Lights

Fire Alarm Panels

Heat Detector

Stand Alone Detectors

Carbon Monoxide Gas Detector

Manual Call Point

LPG Gas Detector

Anti-Theft Alarm

Fire Alarm Hooters

Analog Addressable Fire Alarm System

Smart & INTELLIGENT

ASES SECURITY
ASES Security Pvt. Ltd.

FIRE ALARM SYSTEM
ELECTRICAL CONTROL PANELS
FIRE RATED DOORS
FIRE SUPPRESSION SYSTEM
ASPIRATION SMOKE DETECTORS
EXIT-EMERGENCY LIGHTS
PA/VA SYSTEM
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Electrical Control Panels

Aspiration Smoke Detectors. An Early Warning Systems

Addressable Line-type Heat Detector

Linear Sensing of Temperature

Fire Rated Doors

Shaft Doors

Fire Suppression System
UL Listed 25/42 Bar
FK 1230/HFC-227ea
Clean Agent System

*Designed for marketing purpose only.

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CERTIFICATE of PRODUCT TESTING



Product Details:

Customer Name:

Product Description	6/48 Zone PR	Model No.	PR-6/48Z
Manufacturer	Ases Security Pvt. Ltd.	P.O. No.	Verval
Address	A-2/69, Site-IV Sahibabad Indl. Area Ghaziabad, UP-201010	P.O. Date	
		Quantity	
		Invoice No.	
Phone No.	0120-4152341	Date of Manufacture	
Contact Person		Place of Manufacture	Sahibabad

Routine Testing Details:

S.No.	Test Feature	Feature Standard	Observation
01	Cabinet	CRCA Sheet 18#AWG	
02	Paint	Marble White/ Red	
03	Operating Voltage	230V AC / 24V DC	
04	Fuse Rating	2A / 250V AC	
05	Fire & Fault Relay Rating	2 A / 120V AC, 2A / 24V DC	
06	Detection (Zone) Line	19-23.5 V DC	
07	Hooter Output	24V DC / 2 A (Max)	
08	Display Unit	16x2 Characters	
09	EOL	4K7	
10	Operating Temp	32° to 120° Fahrenheit	

This is certify that **6/48 Zone PR (PR-6/48Z)** supplied as per details has been manufactured by ASES Security Pvt. Ltd. tested as per the provision laid down in **IS 2189-1988** and the **Electronics Regional Test Laboratory (ERTL)**.

Issue Date:

Quality Assurance for **ASES Security**

Mapping Our Growth



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