INSTRUCTION MANUAL

FIRE ALARM SYSTEM

MODEL : PRECISION

ERTL TESTED AS PER IS:2189

AGNI SURAKSHA ELECTRONICS SERVICES

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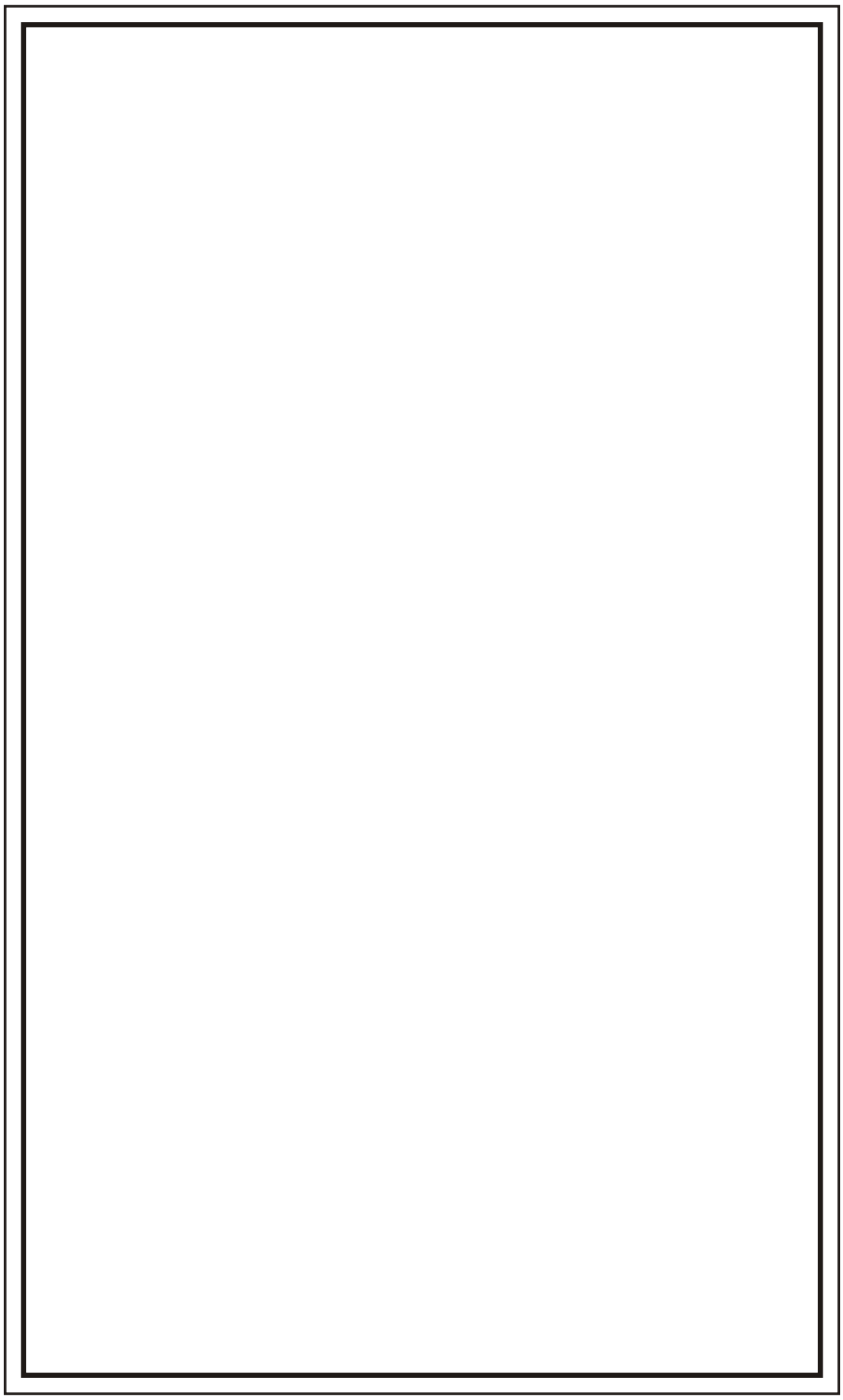
Known for Absolute Reliability ..... Sold All Over India



INTRODUCTION

From very initial, we were very keen about the Security. As generation is going towards the modernization, we want to secure each life by latest technologies, in the field of safety & security product systems our company has taken the responsibility of fire detection & alarm system using the 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 15 years. We have reached the remarkable height because of our professionalism and best qualities of one products. We have our own R&D department for Researching technologies, Programming & quality control assurance.

Now a days, Agni Surakasha is one of the most popular brand in the market. Agni Suraksha is continuously appointing Dealers Authorised System integrator all over India. For getting knowledge of our product range you can visit our website : www.asesindia.com.

* There are wide range of our products according to the requirement of customer.

* We manufacturers conventional as well as semi Addressable Fire Detection & Alarm Systems.

ABOUT THE PRODUCT

ASES is very proud of to introduce PRECISION, the completely degitial 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 16x2 line character LCD display (optional) in the panel by which situation can be visually identify as well as L.E.D. indications are also available. New double door technology gives an impressive look to the panel. There are control switches in front of panel for handling EVACUATE, ALARM ACKNOWLEDGE, LAMP TEST, and RESET. There are LED display for “MAINS ON, SYSTEM ON, AC FAIL, FUSE BLOWN, LOW BATT, FIRE, BATTERY REV, CHARGER TRICKLE, 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 & 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.

The instruction manual guide you to understand your system well.

FEATURES

1. Fully confirms IS 2189.
2. Operates on 230 V, 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, Lamptest,Evacuate.
7. LED indication for zonewise Fire, Open, Short, Zone isolation.
8. Relay O/P for actuators.
9. Mains on, System On visual LED indications.
10. Battery Low, Fuse blown, AC Fail LED indications
11. Flashing window indication for fire & fault
12. 6 to 96 zones expandable facility.
13. Extra potential free contacts for fire & fault.
14. RS-485 communication facility for External repeater/slave panels (Optional).
15. Auto dialer attachable facility
16. Enough inside space for battery
17. Attachable with all types of fire detectors.
18. Rugged CRCA with powder coating fire proof body.

MECHANICAL SONSTRUCTION

The enclosure of the Panel is constructed by CRCA sheet with powder coated finish. The 20mm knock out 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 performed knockouts located at the top of the panel. When the installation of all the cables has been completed, clean the interior of the ensclosure 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 damage/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 LEDs if any other ambr 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 :

ASES Security (p)
All Zones Normal

SYSTEM OPERATION

1. Green Power LED :- A green LED shall normally be on indicating that the system if 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 there are next any abnormality in any zone as short, fire or open.

(B) Shorting Indication :- If there will be shorting in any zone (in hooter line) it will be indicated by the LCD as “short in zone1.

(C) Open line indication :- In case of opening in hooter line or detector line a message will indicate as open condition. e.y. opening in zone1, it will show “Open in zone1”.

TECHNICAL DATA

Panel Operating Condition Operating Voltage		
AC Power	:	220v AC, 50Hz ± 10%
Standby	:	24v DC
Operating Temperature	:	0^0C to 50^0C
Operating Humidity	:	95% (non-conderising)
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)

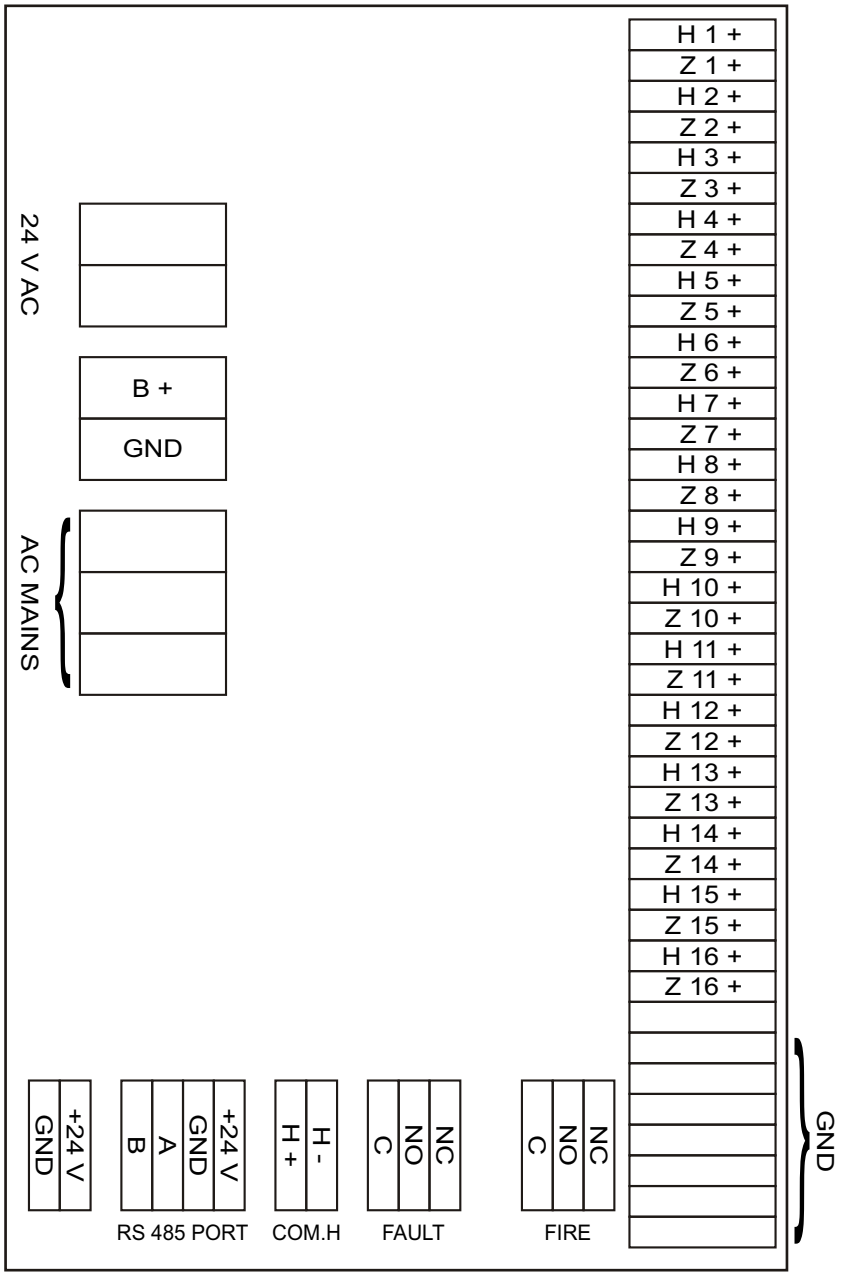
NB : Hooter output current can be increased as per customer requirement.

Remote Outputs

Fire Contact1 (C, NO, NC) : 240vAC @5A/24vDC@2A

Fault Contact (C, NO, NC) : 240vDC@5A/24vDC@2A

16 ZONE PRECISION



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) Walk Test :- For testing the detectors are working or not, without on the sounders we use walk test.

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

6) Zone Test :- If this switch will on then system will check short, open & fire condition zone by zone if there will any abnormality then it will be a sound alert by the buzzer.

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

SERVICING & FAULT FINDING

If you have any problem read this user manual again & check the counter 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 asurakshaxyz@yahoo.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 connector (inside) open.
4) LCD not functioning :		System connector (inside) open
5) Zone trouble	:	Wrong connection
	:	Zone line open / short
	:	Check EOL
6) Hooter trouble	:	Hooter line short / open
	:	Wrong connection

1) 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 :

- The panel and detectors should be within the temperature range of 00C to 400C.
- 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.

TEST REPORT

.....ZONE PRECISION MAIN FIRE ALARM CONTROL PANEL/LOCAL PANEL/REPEATER PANEL.

WORKING ZONE ..... SPARE ZONE .....

CONTRACTOR NAME	:	
CLIENT/SITE	:	
BILL NO./CHALLAN NO.	:	
QUANTITY	:	
SERIAL NO.	:	
P.A. SYSTEM & MIKE	:	**NO**

AC FUSE	:
DC FUSE	:
FIRE CONDITIONS	:
FAULT CONDITIONS	:
FIRE & FAULT RELAY	:
DETECTION & HOOTER LINE	:

This Is to certify that the Fire alarm Control Panels Supplied as per details has been manufactured by **ASES Security Pvt. Ltd.** at Delhi-92 and have been tested as per the provision laid down in IS:2189 manufactured as per the conditions in Electronics Regional Test Laboratory (N).

Test Report No. ERTL(N)/90(4)-2K6/0DC0006 Dated:30/05/2006

It is further certified that all the featured laid down in the panel as per customer's specification have been provided and checked.

Date of Testing :

Date of Issued : **QUALITY CONTROL MANAGER**

Client Copy

WARRANTY CERTIFICATE

Dear Customer,

Your **ASES Security Pvt. Ltd., Fire Alarm System** is guaranteed against manufacturing defects of parts and components for a periods of 12 months from the date of purchase _____

During this period any items found defective will be repaired at our works or though service center.

Terms & Conditions :

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

Serial No.:

Stamp :

Agni Suraksha Electronics Services

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