

# AVANI

## Analogue Addressable Fire Alarm Control Panel



### Product Overview

AVANI, is a cost effective, intelligent addressable fire alarm control panel having an extensive list of powerful features. The power supply with separate metal cabinet and all other master control and indicating boards housed in a other metal cabinet, provide a complete fire control system for most applications. The panel has maximum capability for four loop cards, which are plugged into the main circuit board. Higher loop requirements can be catered to using the networking feature of the panel. There is an option for remote and local programming of the control panel using configuration software / Avani soft , upload/download utility.

### Special Features:

- Indian Manufacturer - International standard.
- UL Listed (9th Edition)
- Switched Mode Power Supply.
- Modular Construction, Serviceability.
- Networkable.
- Auto Resettable Fuse.
- Surge Protection.
- Battery polarity and deep discharge protection.
- 32 Bit processor.
- Unique protocol feature for fast alarm response.
- Inbuilt conventional circuit.
- Touch Keypad for user friendly operation.
- Auto learning facility.
- Multi protocol.
- Peer to Peer Networking.
- Redundancy : If the main CPU fails, it will raise an alarm like conventional panel.

### Features:

- User friendly circuit.
- Device / Detector wise configuration facility.
- 2000 Event Storage with Real Time Clock.
- Upto 192 grouping facility.
- Pre Alarm Action.
- All field wiring are power limited and supervised.
- Programmable detector sensitivity.
- Device type verification.
- Earth fault annunciation facility at 0 ohms.
- Double Address Sensing.
- Walk test
- Loop wise test
- Lamp (LED) test.
- 40 X 4 Characters LCD display
- Maximum 4 numbers of loop card with Class A, Style 5,6 or 7 and Class B Style 4 wiring
- Maximum 254 devices (any combination) per loop.
- Day / Night Mode facility.
- USB 2.0 Interface for PC connectivity.
- RS 485 Communication facility for Network / Repeater.
- Programmable Auto Silence Facility.
- Programmable AC Loos Delay.
- Programmable Silence Inhibit.
- Two no's of programmable inputs.
- Battery low audio, visual warning.
- Three programmable Form C relay for Fire, Fault and Supervisory.
- Two no's of Supervise Notification Appliance Circuits.

*Avani*



## Electrical Specification:

### Primary Power

120 / 220VAC + 10% -15%, 60 / 50 Hz.

### Standby Power

24V D.C (2 No's of 12V, 40 Ah (Max), Built in for 12Ah) Sealed Lead acid battery

### Operating Condition

Operating Temperature 0 - 49° C / 32-120° F.  
Relative Humidity 93 ± 2% RH (non-condensing)  
at 32 ± 2° C / 90 ± 3° F.

### Charging Circuit

Charging Voltage 28 V, ±0.2V Nominal  
Charging Current 1.2A (Max.).

### Notification Appliance Circuits

No of circuits : 2  
Class B, Style - Y wiring  
Operating Nominal Voltage : 24 VDC Nominal  
Current for NACs :  
NAC - 1 : 1A  
NAC - 2 : 0.8 A  
Line Drop : 2.4V  
End-Of-Line Resistor : 4K7, ½ watt

### D.C. Output

Supervised 24VDC, 300mA Max.

### Programmable Relays

Type : Form C  
No of Relays : 3  
Relay Contact Rating : 2A @ 30 VDC,  
0.5A @ 125VAC.

### Signaling Line Circuits

Loop card : 4 Nos. Maximum.  
No Devices per loop : 254  
Loop resistance : 40 Ω (Max.).  
Loop capacitance : 0.6 µf (Max.).  
Loop Current : 300mA (Max.).

### Initiating Device Circuits

Class B Style B/C Operation.  
No of Conventional Zone : 1  
Normal Operating Voltage : 14 - 21 VDC.  
Alarm Current : 15 - 30mA.  
Short Circuit Current : 45mA Maximum.  
Loop resistance : 100Ω Maximum.  
End-Of-Line Resistor : 4K7, 1/2watt  
Standby Current : 7mA (2mA for Detectors)

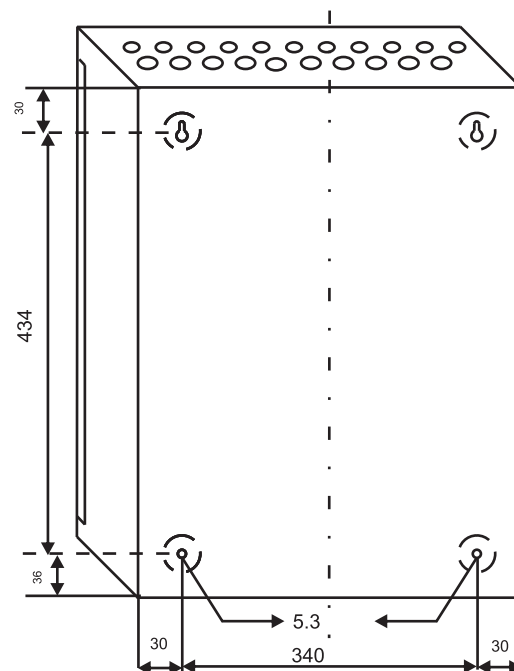
### Programmable Input Circuit

Normal Operating Voltage : 4 - 8 VDC.  
Short Circuit Current : 3mA Maximum.  
Loop resistance : 100Ω Maximum.  
End-Of-Line Resistor : 4K7, 1/2watt  
Standby Current : 1.25mA

## Mechanical Specification:

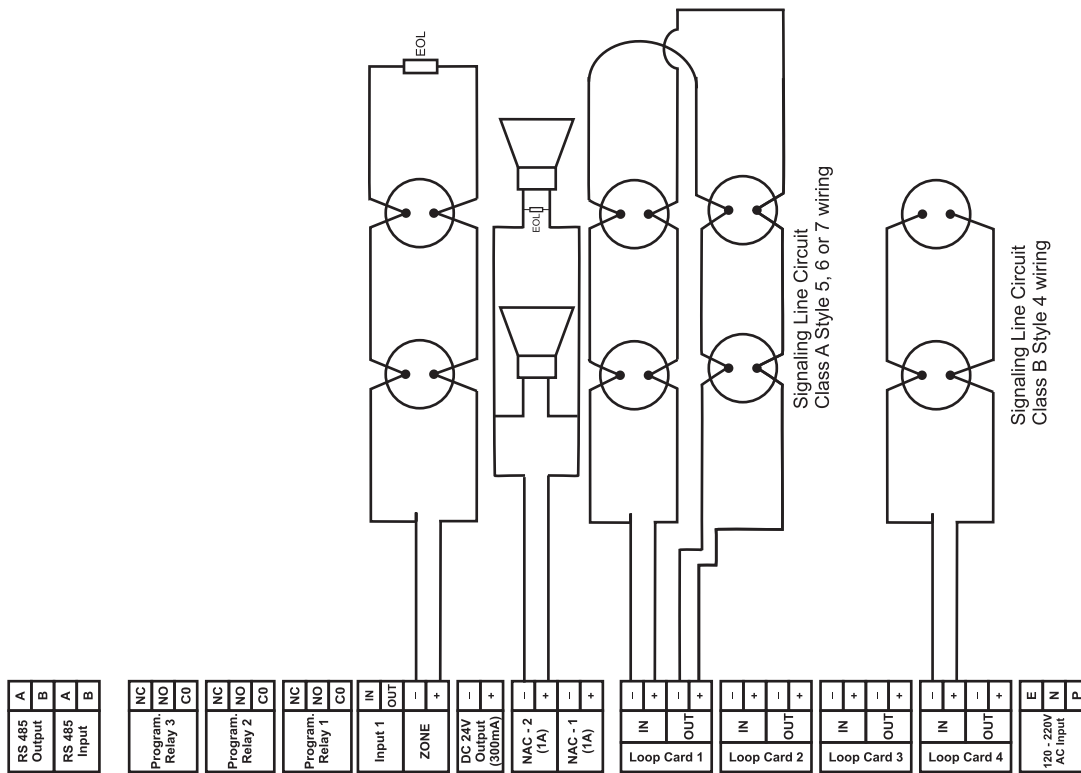
Dimensions : (400W X 500H X 120D)mm  
Color : White / Red / Black  
Construction : 16 Gauge (1.6 mm) CRCA sheet with powder-coated Finish  
IP Rating : IP50  
Cable Entry : 9x∅19mm Knockout in top of the cabinet  
9x∅22.25mm Knockout in top of the cabinet  
Weight : 13 Kg

## Mounting Detail:



Note:- All Dimensions are in MM

# Wiring Diagram:

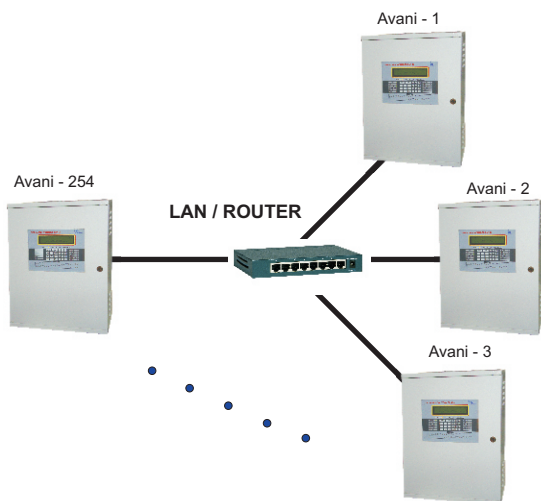


**Note:**

- ⊙ All the field wiring circuits are supervised
- ⊙ All the field wiring circuits are Power limited except 110-220v A.C and Battery.

Initiating Device Circuit  
 Class B StyleB/C  
 End of Line - 4K7 1/2W  
 PN: RE4K7

## IP Based Network



## Peer To Peer Network



## Compatible Devices:

MODELS	DESCRIPTION
RE-317D-SHL	Photoelectric & Heat detector
RE-317D-SL	Photoelectric smoke detector
RE-317D-HL	Heat detector
RE-717MC	Control Module
RE-717MM	Monitor Module
RE-717MR	Relay Module
RE-717MI	Isolator Module
RE-717M	Manual Call Point
RE-517MT	8 Way Programmable Relay Card
RE-517MB	Modbus Converter
RE-517ME	Ethernet Module
RE-517MP	Printer Module
Avani - RP	Fire Alarm Repeater Panel
RE-314BI	Isolator Base
RE-515MP-A4	Mimic Display System - 32 LED Panel (Max)
RE-515MP-A3	Mimic Display System - 64 LED Panel (Max)
RE-515MP-A2	Mimic Display System - 128 LED Panel (Max)
RE-515MP-AX	Mimic Display System - 512 LED Panel (Max)
RE-4K7	End Of Line Resistor

## Approval:



## Ordering Information:

MODEL	Loop
Avani - W / R / B	1,2,3 & 4 Loop

Note:

W - White Color

R - Red Color

B - Black Color

\*In the interest of improving quality and design, Ravel reserve the right to change the specification without prior notice.

### India:

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