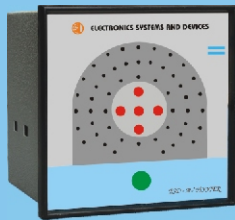




ELECTRONICS SYSTEMS AND DEVICES

ESD's microcontroller-based Alert series includes window type panel mounting and mimic type wall mounting Alarm Annunciators. They are used for giving audio and visual indication of fault conditions arising in the plant. Specially selected RED LED for window ensure long distance visibility, low power consumption and unlimited life with virtually no need for replacement. Super bright LED and different flash rates convey instantly the nature of fault. Use of opto isolators ensure high noise immunity even in EMI/RFI noisy environments. Test, Accept and Reset push buttons are either inbuilt or can be connected externally. Sturdy, state-of-the-art design with embedded microcontroller along with simplified but powerful algorithms ensure faster response and higher reliability even in extreme environmental conditions. With inbuilt watch dog timer and triple filter regulated power supply, these alarm annunciators can withstand wide variations in supply voltage and frequency. Dust and vermin proof special steel enclosures with epoxy powder coating extend product durability. With over 40 different models in Alert series for 4,6,8,12,16,24,32,48 points the customer has a wide selection choice. "Make or Break to alarm" contact configuration is individually field selectable. ESD pioneered the manufacture of mimic type wall mounting alarm annunciators which display total plant status on the mimic. We can design and supply the required mimic diagram as per plant layout. We also manufacture electronic Hooters and Flashers for audio visual fault annunciation.

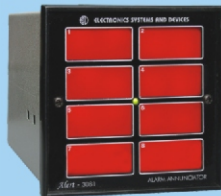
AV Hooter



Hooter

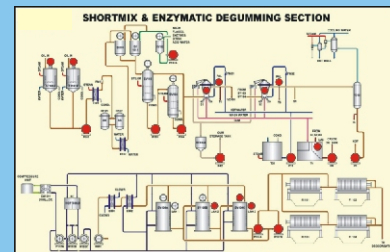


Alarm Annunciator Window type



Alarm Annunciator Mimic type

ALARM ANNUNCIATORS



ESD ALARM ANNUNCIATORS

Alarm Annunciator Window type

ESD's microcontroller based Alert series window type panel mounting Alarm Annunciators are used for giving audio visual indications of the fault condition. Specially selected super bright RED LED's ensures long distance visibility and trouble free long life service.



Model Alert - 6081 (refer model selection chart)

- No of Points : Potential free contacts as per chart
- Contact type : Make or Break to alarm individually selectable
- Indication : Super bright RED LED's
- LED's per Window : Approx. 6 to 12 nos. (as per window size)
- Window inscription : Photo +ve or Photo -ve
- Flash rate : Slow -7 ; Fast -22 ; Faster - 40 flashes/minute
- Output : Relay contact for Hooter
- Power supply : 230 V AC, $\pm 10\%$
- System healthy : Continuously flashing green LED
- Push Buttons : Accept, Test & Reset connect externally (Inbuilt optional)
- Response time : <10 Sec
- Operating sequence : ISA standard site selectable
 - Auto Reset (factory set)
 - Manual Reset
 - Auto Reset first up
 - Manual Reset first up
- Visible Distance : Upto 50 meters
- Facia size : Refer model selection chart (other on demand)
- Mounting : Flush panel

| Model Selection Series | | Alert - XXXX | | | | | |
|------------------------|---------------|--------------|------|------|------|------|----|
| Front Facia | No. of Points | 4 | 6 | 8 | 12 | 16 | 24 |
| 96 x 96 | 3041 | 3061 | 3081 | - | - | - | - |
| 192 x 96 | - | 6061 | 6081 | 6121 | 6161 | - | - |
| 144 x 144 | - | 8061 | 8081 | 8121 | 8161 | - | - |
| 288 x 144 | - | - | - | N121 | N161 | N241 | - |

Note - • Window size, matter size, no. of rows and no. of columns depends on model selected. • 32 & 48 points on demand.

For details, please ask for ESD / AA / 4602

Alarm Annunciator Mimic type

ESD's microcontroller based Alert series mimic type wall mounting Alarm Annunciators are used to give signals for audio visual indications of the fault condition. These Annunciators can be connected to potential free field contacts or signals from PLC's. User can connect superbright RED LED's which are mounted on the Mimic. These annunciators along with the mimics helps in visualising the online plant status.



Model Alert 16W

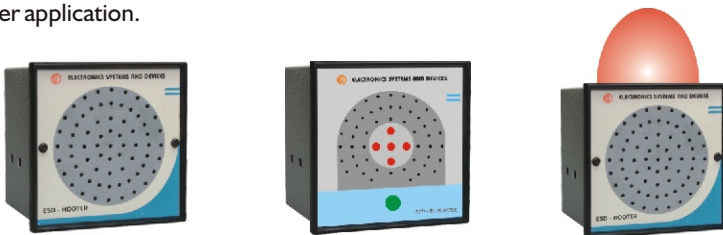
- No of Points : Upto 16 potential free contacts
- Contact type : Make or Break to alarm individually selectable
- Indication : External LED's on mimic
- Flash rate : Slow - 7 ; Fast - 22 ; Faster - 40 flashes per minute
- Output : • 10 V, 10 mA DC Signal to drive LED's.
 - Relay contact for Hooter
- Power supply : 230 V AC, $\pm 10\%$
- System Healthy : Continuously flashing green LED
- Push Buttons : Test, Accept & Reset connect externally
- Response time : <10 Sec
- Operating Sequence : ISA standard site selectable.
 - Auto Reset (factory set)
 - Manual Reset
 - Auto Reset first up
 - Manual Reset first up
- Mounting : Wall
- Size : 160 x 150 x 65

Note - • No. of inputs can be expanded in multiples of 16 by using 2,3,4 units for 32,48,64 points with common Test, Accept, Reset push buttons and Hooter.

For details, please ask for ESD / AA / 4603

Hooter

ESD's Industrial Hooters are for giving a audio alarm signal when fault occurs. These can be connected to the output of alarm annunciator, controllers or to limit switches. These Hooters are known for continuous duty cycle. Different models like Power Hooters and audio visual hooters are available as per application.



Specifications

Input Signal : 230 V AC, $\pm 10\%$ (other on demand)
Tone : Industrial Siren

| Specs. | Model | Hooter | AV Hooter | Power Hooter | Dome Hooter |
|-------------------|-------|--------------|-----------|-----------------|-------------|
| Audio Output | | 80 dB | | 120 dB | |
| Audible distance | | 100 mts | | 200 mts | |
| Size | | 96 x 96 x 80 | | 144 x 144 x 120 | |
| Visual Indication | -- | | 5 LED's | -- | Dome |
| Accept P. B | -- | | Inbuilt | -- | External |

For details, please ask for ESD / AA / 4604



**ELECTRONICS
SYSTEMS AND DEVICES**
Process Control Instruments

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