

SEQUENTIAL OF EVENT RECORDING [SOE]

Client: Pothigai Power Solutions P Ltd

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Sequential Of Event Recorder [SOE]:

SOE is a persistent surveillance system deployed to watch and sense devices of many types and functions. SOE are designed in various sizes depending upon the application, ranges starts from 8 Channel to 1000 Channels.

It can be configured to provide the best solution for various size and complex alarm scheme. Sertel SOE is a field proven multi-redundant ASIC design, this Annunciator is highly reliable and programmable for all applications and industries.

Wide range of window size, colors could be accustomed as required. This allows the user to select many different features giving thousands of possible combinations.

Numerous relay outputs are included as standard output to connect to external equipment and individual repeat relays or communications can be supplied as an optional output.

The programming flexibility creates option for the users to easily configure many operations including alarm sequence, time delays, relay operation, first-up grouping, functionality, and communications and so on.

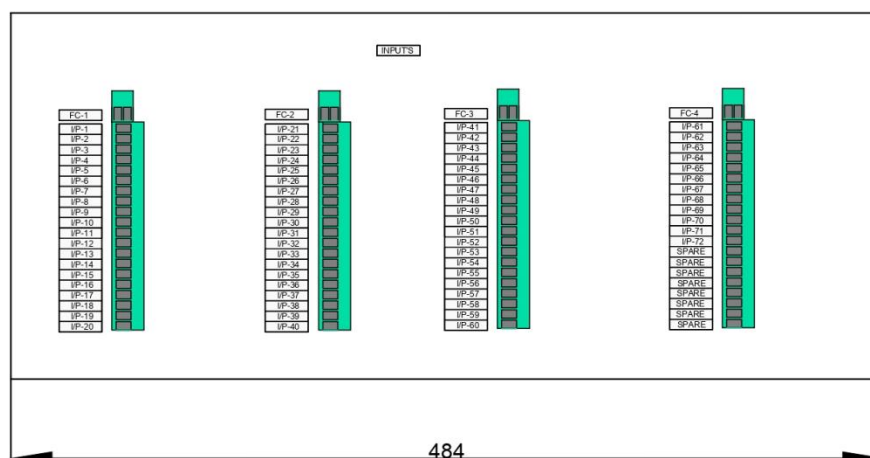
Front Facia Overview

The Front Facia unit is built with panel mountable types which can be supplied as per customer requirement. In front side, display Facias are installed and the connection from field input unit to Front Facia Unit is provided in the rear side. Power failure indications are provided in the front side of the SOE.

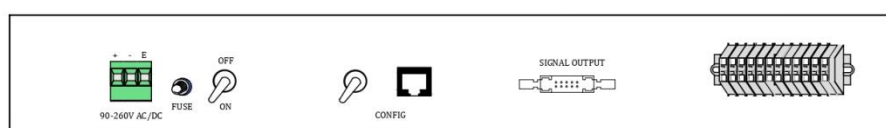
SOE Input Card

SOE input card is built with Panel mountable types which can be supplied as per site requirement and input cards can be cascaded accordingly. The input boards have connection to the input field contacts, Redundant Power Supply connection, External Communication requirement through FRC connector, Hooter Contact and External Pushbuttons connection are provided in the front side of the AIU Unit.

The interconnection between the AIU and Front Facia unit is provided in the Rear side of the Logic Rack Unit.

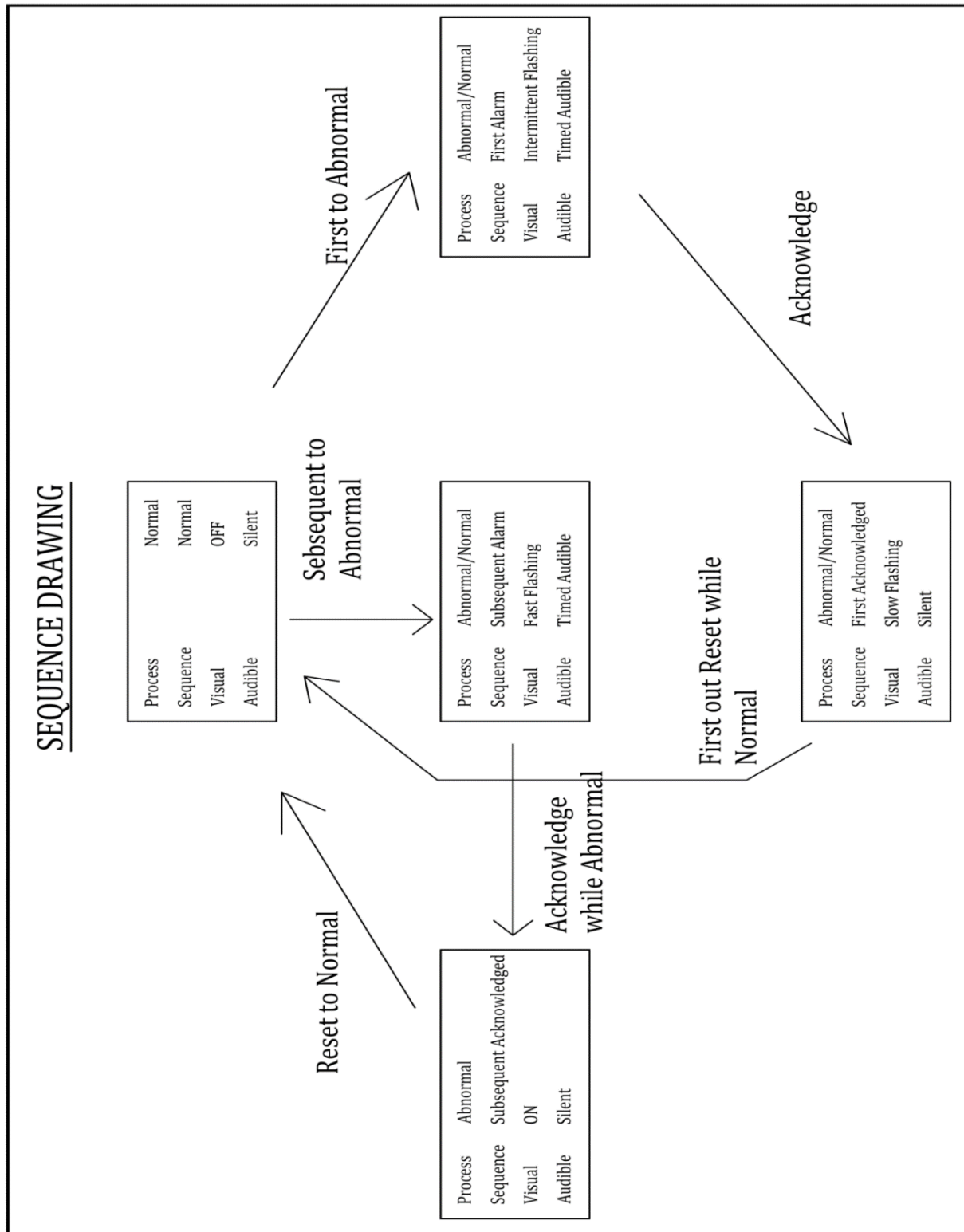


FRONT VIEW



BOTTOM VIEW

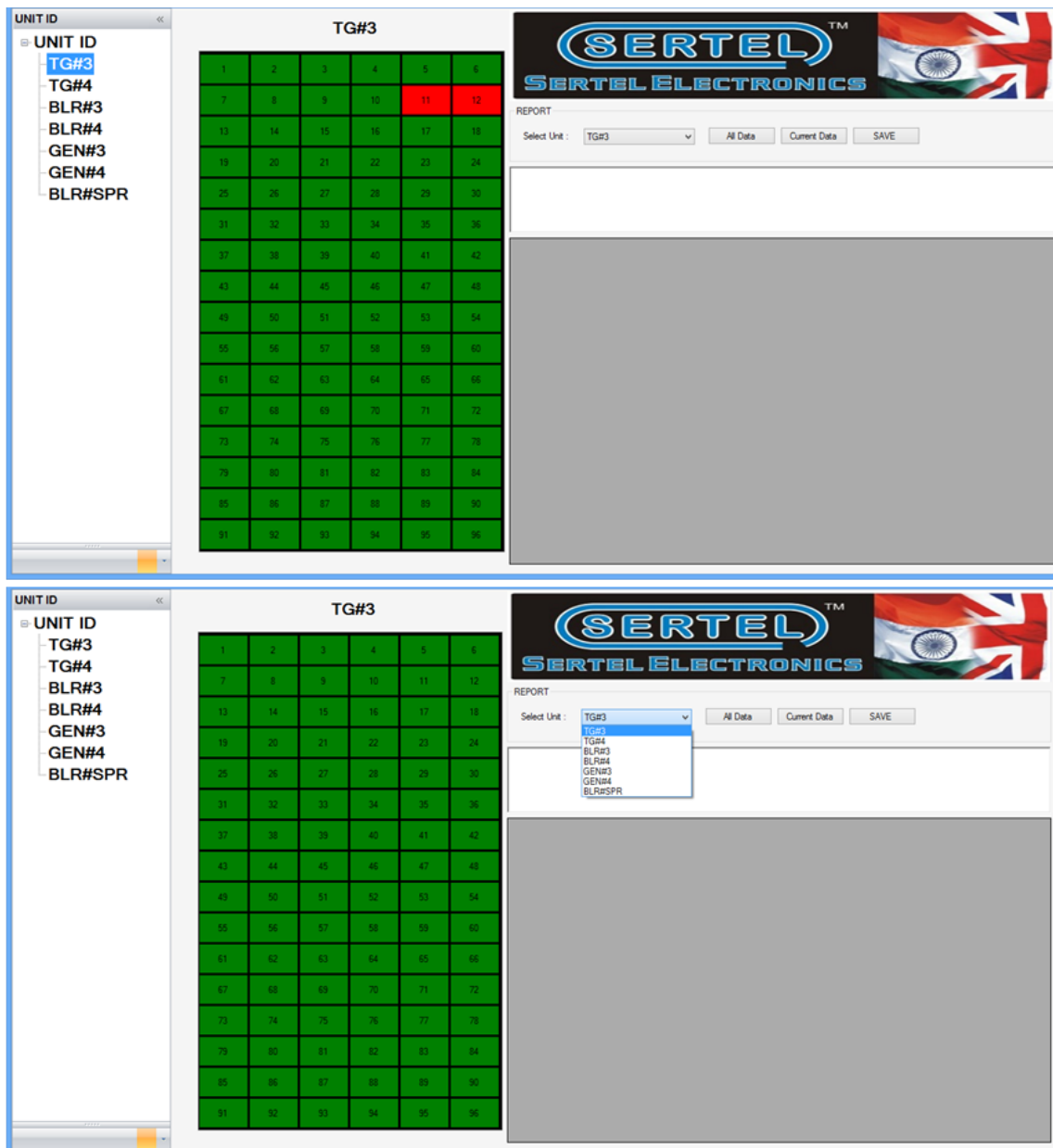
Sequence



1 Software Configuration Techniques

SOE-AA-XX is a SOE software which allows the user for configuration of Sequences / Alarms and Monitoring of the alarms. This Software allows the following


- Configuration of Alarms/Sequence
- Configuration of IP address



UNIT ID
UNIT ID
TG#3
TG#4
BLR#3
BLR#4
GEN#3
GEN#4
BLR#SPR

TG#3

1	2	3	4	5	6
7	8	9	10	11	12
13	14	15	16	17	18
19	20	21	22	23	24
25	26	27	28	29	30
31	32	33	34	35	36
37	38	39	40	41	42
43	44	45	46	47	48
49	50	51	52	53	54
55	56	57	58	59	60
61	62	63	64	65	66
67	68	69	70	71	72
73	74	75	76	77	78
79	80	81	82	83	84
85	86	87	88	89	90
91	92	93	94	95	96




REPORT
Select Unit : TG#3 All Data Current Data SAVE

S_NO	W_NO	DATE	TIME	LEGEND
1	50	13-01-20	22:51:41.648	REAR BRG TEMP HIGH
2	68	13-01-20	22:53:42.799	DP SEAL OIL FILTER HIGH
3	76	13-01-20	22:53:43.47	BFP#48 RECIRCULATION VALVE OPEN
4	56	13-01-20	22:53:44.104	SEAL OIL TEMP AFTER COOLER HIGH
5	45	13-01-20	22:53:46.640	CEP#4A TRIP
6	1	13-01-20	22:55:44.200	TURBINE TRIP
7	2	13-01-20	22:55:45.872	TURBINE TRIP(EMERGENCY)
8	3	13-01-20	22:55:46.735	TURBINE OVERSPEED(MECH)
9	4	13-01-20	22:55:47.600	TURBINE TRIP AXIAL/OVERSPEED(MECH)
10	5	13-01-20	22:55:47.272	OVERSPEED TRIP(ELEC)
11	6	13-01-20	22:55:48.328	HPH#2 LEVEL VERY VERY HIGH
12	7	13-01-20	22:55:49.192	HPH#1 LEVEL VERY VERY HIGH
13	8	13-01-20	22:55:50.56	LPH#2 LEVEL VERY HIGH
14	9	13-01-20	22:55:51.824	LPH#1 LEVEL VERY HIGH
15	10	13-01-20	22:55:52.592	TURBINE VACUUM LOW
16	21	14-01-20	02:43:48.50	LPH#1 LEVEL HIGH
17	22	14-01-20	02:43:49.818	SEAL OIL COMP E.S OIL LEVEL HIGH
18	23	14-01-20	02:43:50.874	TURBINE SPEED N-100

UNIT ID
UNIT ID
TG#3
TG#4
BLR#3
BLR#4
GEN#3
GEN#4
BLR#SPR

TG#3

1	2	3	4	5	6
7	8	9	10	11	12
13	14	15	16	17	18
19	20	21	22	23	24
25	26	27	28	29	30
31	32	33	34	35	36
37	38	39	40	41	42
43	44	45	46	47	48
49	50	51	52	53	54
55	56	57	58	59	60
61	62	63	64	65	66
67	68	69	70	71	72
73	74	75	76	77	78
79	80	81	82	83	84
85	86	87	88	89	90
91	92	93	94	95	96



REPORT
Select Unit : TG#3 All Data Current Data SAVE

S_NO	W_NO	DATE	TIME	LEGEND
31	11	06-02-20	02:44:51.642	LUBE OIL PR LO...
32	12	06-02-20	02:44:53.466	EXCESSIVE SH...

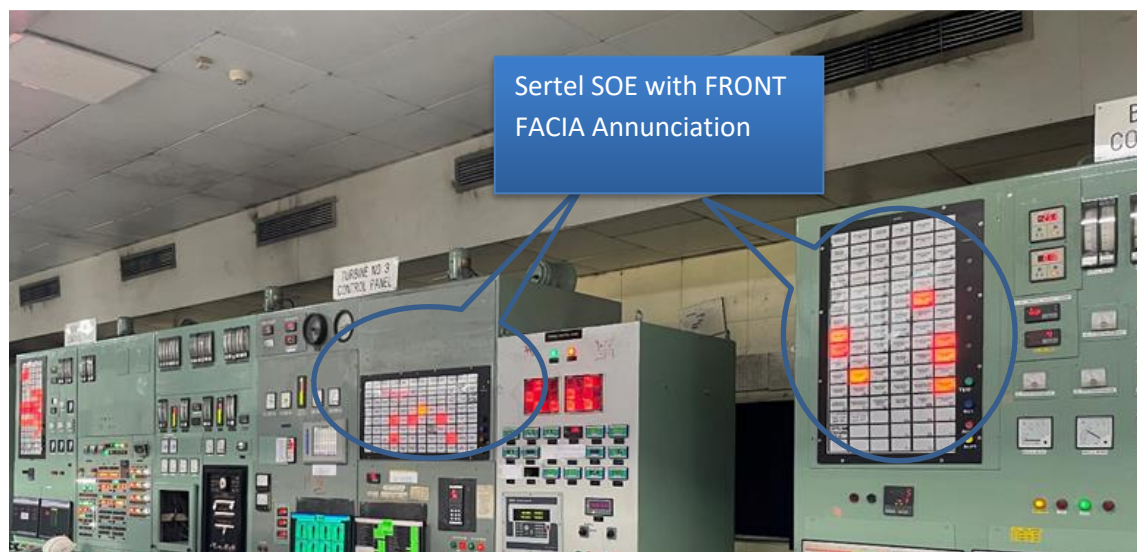
The above Software package provides a complete database of events collected from various alarm points through potential free contacts or protocols such as Modbus RS485/TCP or Profibus, IEC6850 – Goose/MMS, IEC-104/103 inputs. Sertel's System can act on alarms from any of these inputs thereby storing these events in chronological order for proper post mortem of the alarms.

Existing Installation at Site:



Sertel SOE
with FRONT
FACIA
Annunciation

Sertel HMI for
Sequential
Event Recorder







Sertel SOE combined with our Data Monitoring Software can be combined to form a Mini Scada wherein the data monitored accurately & the measurements data from the process can be combined together for Supervisory Control actions with very well-informed rich data collected & analytics.