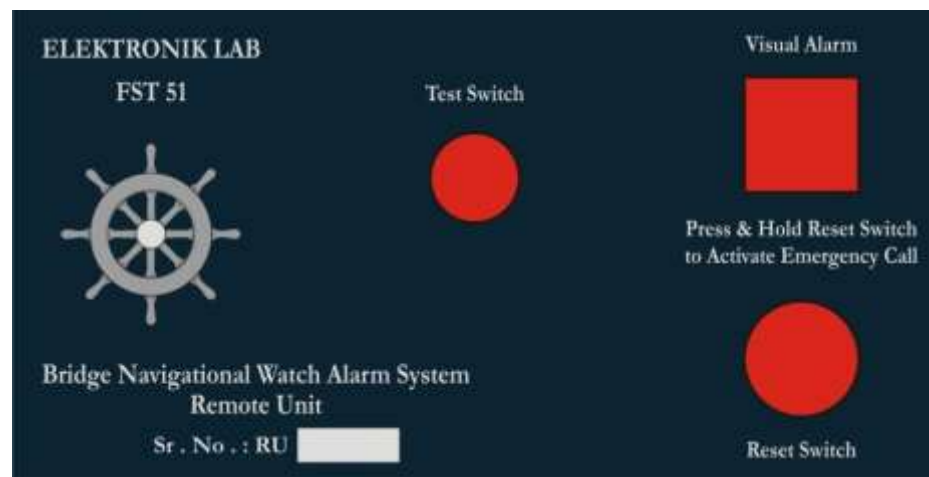




FST-51 Bridge Navigation Watch Alarm System



Front View (MASTER UNIT)



Front View (REMOTE UNIT)

Highlights of FST51

- 20 x 4 LCD Display with Backlight High Contrast.
- 4 x 2 Seven Segment Displays for Operational Mode & Countdown timer.
- Display of SOG (GPS) in Kts.
- Display of Autopilot status
- Dormant Period : 3 Mins. To 12 Mins.
- Manual Off / On Operational Mode
- Automatic Operational Mode
- 4 Key User / Service Interface
- Hardware (Lock) Protection
- Software (Password) Protection
- Visual / Audible Alarm Reset Switch on the Main Unit & Remote Units on the Bridge.
- Emergency Call / immediate Assistance Switch on Main Unit.
- Test Switches on the Main Unit & Remote Units to Test (Simulate) the Visual & Audible Alarms.



Features :

- External Motion Detector Interface
 - Heading / Track Control System (Autopilot) Serial / Contact Closure / Voltage Interface Input
 - Global Positioning System (GPS) Serial Interface Input
 - VDR / S-VDR (\$BNALR,) Serial Interface Output
 - Computer / External Software (\$ELFST,) Serial Interface Output (Proprietary)
 - Remote Units for Conning Position on the Bridge , Workstation for Navigating and Manoeuvring on the Bridge (Optional) , Workstation for Monitoring on the Bridge (Optional) , Bridge Wings (Optional) , Captain's / Master's Location , Backup Officer 1 Location (Optional) , Backup Officer 2 Location (Optional) and for the Location of further Crew Members
- For Statutory Fitment on all Cargo Ships of 150 gross tonnages and above as well as on all Passenger Ships , irrespective of the size.

Technical Specifications :

- Power Supply
 - Supply Voltage : 24 V DC
 - Protection : Fuse (Current Limit) and Reverse Polarity
- Display
 - 20 x 4 Character Liquid Crystal Display (LCD) with Backlight
 - 4 x 2 Seven Segment Display (SSD) with Illumination Intensity Control
- User Interface
 - 4 Key Interface : Up , Down , Escape & Enter Keys
 - Visual / Audible Alarm Reset Switch on Main Unit & Remote Units on the Bridge
 - Emergency Call / Immediate Assistance Switch on Main Unit & Remote Units on the Bridge
 - Test Switches : Tests (Simulates) Visual & Audible Alarms
- Configuration
 - Dormant Period : 3 Mins. To 12 Mins.
 - 2nd Stage to 3rd Stage Alarm Delay : 90 Secs. to 180 Secs.
 - Operational Modes : Manual Off (Always Off i.e. not operated under any circumstances)
Automatic (Activated / Inhibited by Autopilot and / or GPS)
Manual On (Always On i.e. in operation continuously)
- Remote Units
 - Conning Position on the Bridge
 - Workstation for Navigating and Manoeuvring on the Bridge (Optional)
 - Workstation for Monitoring on the Bridge (Optional)
 - Bridge Wings (Optional)
 - Captain's / Master's Location , Backup Officer 1 Location (Optional) , Backup Officer 2 Location (Optional)
 - Location of further Crew Members
- Failure / Malfunction Alarms
 - Mains DC Supply / Battery DC Supply Failure / Malfunction
 - External Motion Detector Tamper / Continuous Output Alarm



Date & Time Interface

- **Source : GPS (\$GPRMC,) or Internal Real Time Clock (RTC)**
- **Security**
 - **Hardware (Lock) Protection : System On / Off using 2 Way Removable Key Switch**
 - **Software (Password) Protection : Service Setup Menu protected with 4 Digit Pass Code**
- **External Motion Detector Interface**
 - **No. of Interfaces : 2 Nos.**
 - **Sensor : Passive InfraRed (PIR) + MicroWave (MW)**
 - **Dimensions : 112 mm. x 66 mm. x 45 mm.**
 - **PIR + MW / Tamper Contact : Normally Open (NO) / Normally Closed (NC)**
- **Heading / Track Control System (Autopilot) Interface Input**
 - **Input Type : Serial (NMEA 0183) , Contact Closure or Voltage Input**
 - **Serial (NMEA 0183) Sentence : \$--HTC, or \$--HTD, @ 1200 bps. to 38400 bps. Baud Rate**
- **Global Positioning System (GPS) Interface Input**
 - **Input Type : Serial (NMEA 0183)**
 - **Serial (NMEA 0183) Sentence : \$GPRMC, or \$GPVTG, @ 1200 bps. to 115200 bps. Baud Rate**
- **VDR / S-VDR (\$BNALR,) Interface Output**
 - **Serial (NMEA 0183) Sentence : \$BNALR, @ 1200 bps. to 115200 bps. Baud Rate**
 - **Serial Standard : 2 x RS 232 + 2 x RS 422 (Buffered & Simultaneous)**
 - **Transmission Interval : 1 Sec. , 2 Secs. , 3 Secs. or Automatic**
- **Computer / External Software (\$ELFST,) Interface Output (Proprietary)**
 - **Serial Sentence : \$ELFST, (Proprietary) @ 1200 bps. to 115200 bps. Baud Rate**
 - **Serial Standard : 2 x RS 232 + 2 x RS 422 (Buffered & Simultaneous)**
 - **Transmission Interval : 1 Sec. , 2 Secs. , 3 Secs. or Automatic**
- **Dimension s**
 - **Main Unit : 222 mm. (width) x 185 mm. (height) x 106 mm. (depth)**
 - **Remote Unit : 197.5 mm. (width) x 90 mm. (height) x 45.5 mm. (depth)**



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