VESDA®

LCD Programmer Product Guide

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xtralis®

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You agree that you have been provided with a reasonable opportunity to appraise the products and have made your own independent assessment of the fitness or suitability of the products for your purpose. You acknowledge that you have not relied on any oral or written information, representation or advice given by or on behalf of Xtralis or its representatives.

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(i) in the case of services, the cost of having the services supplied again; or

(ii) in the case of goods, the lowest cost of replacing the goods, acquiring equivalent goods or having the goods repaired.

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You agree to fully indemnify and hold Xtralis harmless for any claim, cost, demand or damage (including legal costs on a full indemnity basis) incurred or which may be incurred arising from your use of the products.

Miscellaneous

If any provision outlined above is found to be invalid or unenforceable by a court of law, such invalidity or unenforceability will not affect the remainder which will continue in full force and effect. All rights not expressly granted are reserved.

Document Conventions

The following typographic conventions are used in this document.

Convention	Description
Bold	Used to denote: emphasis Used for names of menus, menu options, toolbar buttons
Italics	Used to denote: references to other parts of this document or other documents. Used for the result of an action.

The following icons are used in this document

Convention	Description
	Caution: This icon is used to indicate that there is a danger to equipment. The danger could be loss of data, physical damage, or permanent corruption of configuration details.
	Warning: This icon is used to indicate that there is a danger of electric shock. This may lead to death or permanent injury.

	Warning: This icon is used to indicate that there is a danger of inhaling dangerous substances. This may lead to death or permanent injury.

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Codes and Standards Information for Air Sampling Smoke Detection

We strongly recommend that this document is read in conjunction with the appropriate local codes and standards for smoke detection and electrical connections. This document contains generic product information and some sections may not comply with all local codes and standards. In these cases, the local codes and standards must take precedence. The information below was correct at time of printing but may now be out of date, check with your local codes, standards and listings for the current restrictions.

FCC Compliance Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, the user is encouraged to try to correct the interference by one or more of the following measures; re-orientate or relocate the receiving antenna, increase the separation between the equipment and receiver, connect the equipment to a power outlet which is on a different power circuit to the receiver or consult the dealer or an experienced radio/television technician for help.

FDA

This VESDA product incorporates a laser device and is classified as a Class 1 laser product that complies with FDA regulations 21 CFR 1040.10. The laser is housed in a sealed detector chamber and contains no serviceable parts. The laser emits invisible light and can be hazardous if viewed with the naked eye. Under no circumstances should the detector chamber be opened.

FM

3611 Hazardous Approval Warning: Exposure to some chemicals may degrade the sealing of relays used on the detector. Relays used on the detector are marked “TX2-5V”, “G6S-2-5V” or “EC2-5NU”.

VESDA detectors must not be connected or disconnected to a PC while the equipment is powered in an FM Division 2 hazardous (classified) location (defined by FM 3611).

FM Approved Applications

The product must be powered from VPS-100US-120, VPS-100US-220 or VPS-220 only.

ONORM F3014

ONORM F3014, transport times for all tubes (including capillaries) must not exceed 60 seconds from any hole. This means that the pre-designed pipe networks that include capillaries cannot be used.

AS1603.8

The performance of this product is dependent upon the configuration of the pipe network. Any extensions or modifications to the pipe network may cause the product to stop working correctly. You must check that ASPIRE2 approves alterations before making any changes. ASPIRE2 is available from your VESDA ASD distributor.

AS1851.1 2005

Maintenance Standards. Wherever this document and the AS1851.1 differ, AS1851.1 should be followed in preference to this document.

European Installations

The product must use a power supply conforming to EN54: Part 4.

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Contents

1.1 Scope

The VESDA LCD Programmer Product Guide contains comprehensive information about the features, installation, and use of the LCD Programmer.

The VESDA LCD Programmer Product Guide is written for people who are involved in the design, purchase, installation, commissioning, monitoring, maintenance, and management of a VESDA system.

1.2 Introduction to LCD Programmer

The LCD Programmer interfaces with most of the VESDA laser family of products through VESDAnet. The RO model LaserCOMPACT, System Relay Module and AOM cannot be programmed using the LCD Programmer.

The programmer enables management and interrogation of VESDA laser family devices connected to VESDAnet.

Features of LCD Programmer

The LCD Programmer features:

- User friendly menu systems
- Multiple language support
- Single point of access to the entire VESDAnet network
- Alarm and fault simulation
- Wiring order display
- Communications failure location
- Password security
- Automatic logoff when inactive
- Backlit LCD screen

1.3 Product Information

The VESDA LCD Programmer allows the configuration, commissioning, managing and maintaining the VESDA system.

Legend	
A	Display
B	Soft Keys
C	Hard Keys

Figure 1 - The LCD Programmer Module

The LCD Programmer module can be placed either in the center or the right plate of a LaserPLUS or LaserSCANNER detector Front Cover, or in a VESDA Remote Mounting System. For further information see the VESDA *Remote Systems Product Guide.*

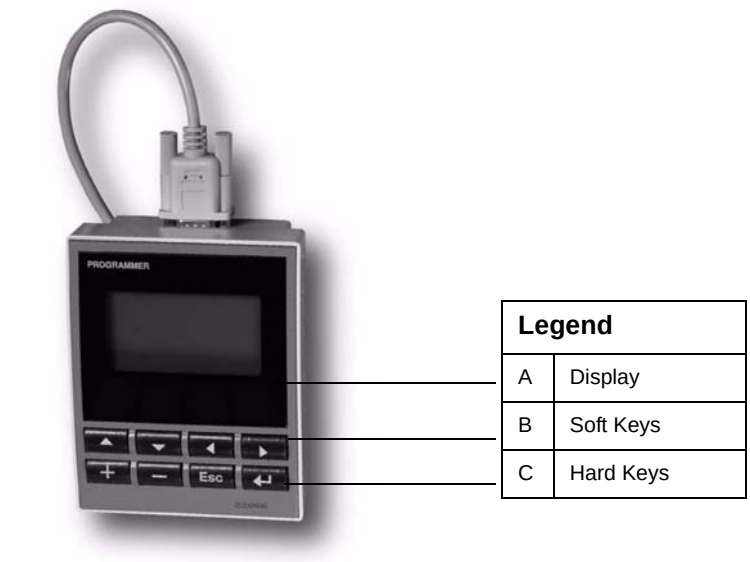

Figure 2 - The Hand-held LCD Programmer

A hand-held version of the programmer offers the flexibility of connecting to VESDAnet at multiple points.

Product Specifications

Supply Voltage	18 to 30 VDC		
Screen Display	70 mm x 37 mm (2.75 in x 1.45 in) Full graphic display Large characters 8 lines, 21 characters per line Adjustable backlit screen with contrast control		
Inactivity Time Out	10 minutes (Defaults to VESDA Standby screen) Beeps at 1 minute and then continuously for 15 seconds before log off		
Push Button Keys	2 rows x 4 keys, each key 19 mm x 12 mm (0.75 in x 0.50 in)		
User Levels	User (up to 10 Users) Administrator (3 Administrators) Distributor (1 Distributor)		
Default User Level IDs	USR = Operator ADM = Administrator DST = Distributor		
Security Access	3 character User Level ID 4 digit individual Personal Identification Number (PIN) (Default PIN is available with VESDA Distributors)		
Operating Temperature	Ambient: 0^{o} to 39^{o}C (32^{o} to 103^{o}F)		
Humidity	10-99% RH, non-condensing		
Maximum VESDA Devices Addressed	250 devices		
VESDA Devices Addressed	LaserPLUS Detector and Display LaserSCANNER Detector and Display LaserCOMPACT Detector (VN Model) and Display HLI (High Level Interface) Relay Modules Remote Relays		
Power Usage		**Power at 24 VDC**	**Current at 24 VDC**
Module	Min	0.6 W	20 mA
	Max	2.3 W	80 mA
Hand-held	Min	1.3 W	50 mA
	Max	3.0 W	110 mA
Remote	Min	1.3 W	50 mA
	Max	3.0 W	110 mA
Dimensions	**Module**	**Hand Held**	**Remote**
mm	98 x 130 x 30	105 x 135 x 60	140 x 150 x 90

Inches	3.9 x 5.1 x 1.21	4.1 x 5.3 x 2.4	5.5 x 5.9 x 3.5
Connections:	Terminal Connector to Head Processor Card or to expansion connector on another VESDA device.	15 pin D-type connector. VESDAnet cable required. Connects to Detector or Remote VESDAnet Socket.	RS485 VESDAnet field wiring to screw terminals blocks (0.2 - 2.5 mm, 30 - 12 AWG

Table 1 - LCD Programmer specifications

The LCD Programmer Keys

The LCD Programmer has two rows of keys. The keys are used to move the cursor and to use the various functions of the LCD Programmer.

The top row of keys have dual functions and are known as “Soft Keys”. When the commands NO, BACK, YES, CONT, EXIT, QUIT, or WAIT are displayed on the LCD screen, the soft key directly below the command actions the respective command.

The bottom row are the “Hard Keys”. Each hard key has a single function. The function of the LCD Programmer keys are mentioned in Table 3, *“Description of LCD Programmer keys and functions”* on page 7.

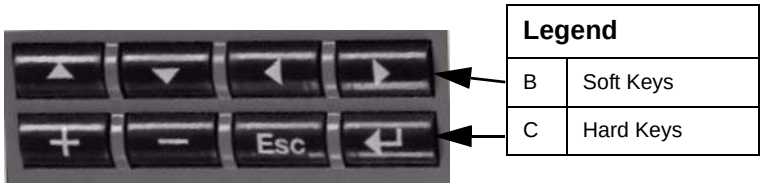

Figure 3 - LCD Programmer keys

1.4 User Access Levels and PIN

User Access Level

The three user access levels allow different people to access different sets of functions. The functions that can be edited with USR, ADM and DST access levels are listed in *LCD Programmer Screen Description* on page 12.

User Level	Access Level	Functional Authorization
USR	Low	This is the USER or the OPERATOR level. The user can view the event log, change the date and the time. They can also perform selected VESDA Zone control functions.
ADM	High	At the ADMINISTRATOR level access is available to most functions. These include setting alarm thresholds, normalizing air flows, and defining the relay Configuration.
DST	Absolute	The DISTRIBUTOR level allows unlimited access to all the system commands and parameters.

Table 2 - User access levels

Personal Identification Number (PIN)

The default PIN for each level of user is set at the factory. The distributor has access to the PINs for each level. PIN numbers are disclosed to authorized personnel attending accredited VESDA training courses.

After logging in the user has the option to change the default PIN. To guard against unauthorized access, if someone enters an incorrect PIN number three times they will not be allowed another attempt for ten minutes.

A four digit number and a VESDA contact phone number will be displayed on the screen. No further entries can be made until instructions are received from Xtralis.

Hour Glass Symbol

After executing a command the hour glass symbol is displayed while the LCD Programmer is waiting for updated data to be loaded from the system. To carry on working while the hour glass symbol is displayed, press the Soft Key located below the **CONT** option displayed on the screen. The hour glass symbol will automatically disappear once the data is received by the LCD Programmer, if there is a large amount of information transferred to the LCD programmer this may take several minutes.

1.5 Installing and Connecting the LCD Programmer

Installing an LCD Programmer in a Detector

The LCD Programmer module is snapped into the front cover of the Detector. For wiring details please refer to the product guide for that detector.

Installing an LCD Programmer in a Remote Unit

Please refer to the VESDA *Remote Systems Product Guide* for information on how to install and connect an LCD Programmer to a remote unit or to the 19” sub rack.

Connecting the Hand Held LCD Programmer

The hand held LCD programmer is connected to a VESDAnet socket using a 15 pin D-type connector. A VESDAnet socket is located on the head termination card in each detector. A VESDAnet socket module can be mounted in the front cover of a remote unit or a 19” sub rack.

Connecting an LCD Programmer to VESDAnet will generate a network fault. To clear the fault, select SYSTEM ALL DEVICES ↵ SYSTEMS CONTROL ↵ and RESET

1.6 Operating the LCD Programmer

Standby Mode

The LCD Programmer is powered through VESDAnet. Once the LCD Programmer is powered up the VESDA logo is displayed. This screen is also displayed when the LCD Programmer is in standby mode.

Navigating the LCD Programmer

To navigate the menu tree of the LCD Programmer, to change or view parameters, and to execute system functions, use the eight keys described in the table below.

Key	Key Type	Description	Used For
► ◄	Soft	Directional Key/ Soft Key Function	• Moves Cursor to the left or right of the screen • Scrolls highlighted item left/right • Actions a soft key question
▲ ▼	Soft	Directional Key/ Soft Key Functions	• Moves the cursor up or down on the screen • Scrolls the Menu up or down • Actions a soft key question
+	Hard	Value Increasing Action Key/Page Up	• Increases the value of the displayed number • Adds a selected letter from the displayed alphabet list. • Page up on some screens
-	Hard	Value Decreasing Action Key/Page Down	• Decreases the value of the displayed number • Deletes a selected letter • Page down on some screens
ESC	Hard	Backward Action Key	• Moves back up the Menu tree • Any changes to parameters are actioned after acknowledging the check message “Do you want to save the changes?”
↵	Hard	Forward Action Key	• Moves down the Menu tree by selecting the highlighted option • Adds selected letter • Toggles between values • Can be used to run Normalize, Autolearn, and System/Address control commands

Table 3 - Description of LCD Programmer keys and functions

Logging On/Off the System

It is not necessary to logon to view the data.

When the LCD Programmer is in a standby mode, pressing any key will display the logon screen. To logon:

1. Against User enter the appropriate USER ID using the +/- keys to enter the letters
2. Press the ► key to move cursor to the PIN field
3. Enter PIN using the +/- keys
4. Use the ► and ◄ keys to move from one field to the next (letter or digit)
5. Press ↵ key after entering the PIN

Automatic Log Off

For security reasons, if you do not use the LCD Programmer for ten minutes it will automatically log you off. Sixty and fifteen seconds before the programmer automatically logs you off it will display a warning message and beep. Press any key on the programmer to stop the detector from automatically logging you off.

Intentional Log Off

To log off the system:

1. Press the ESC key until the **Log Off** warning screen is displayed
2. Confirm the **Log Off** with a YES key
3. The LCD Programmer will display the **LOGON** screen
4. Press the ESC key
5. The LCD Programmer will now be in the standby mode and display the VESDA logo.

1.7 The LCD Programmer Menu

A Menu Tree is presented in below. The screen numbering in the Menu Tree corresponds to the screen number in the *LCD Programmer Screen Description* on page 12.

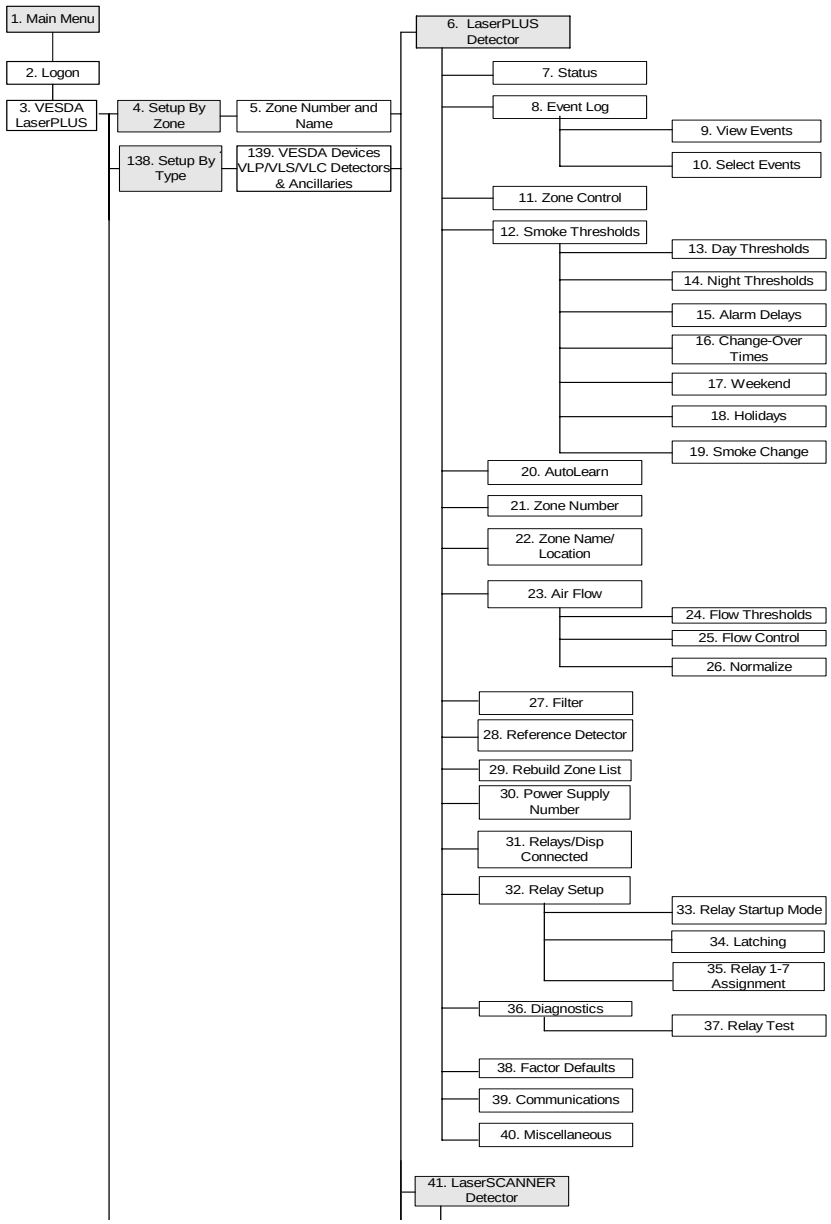

Figure 4 - The programmer menu 1 of 4

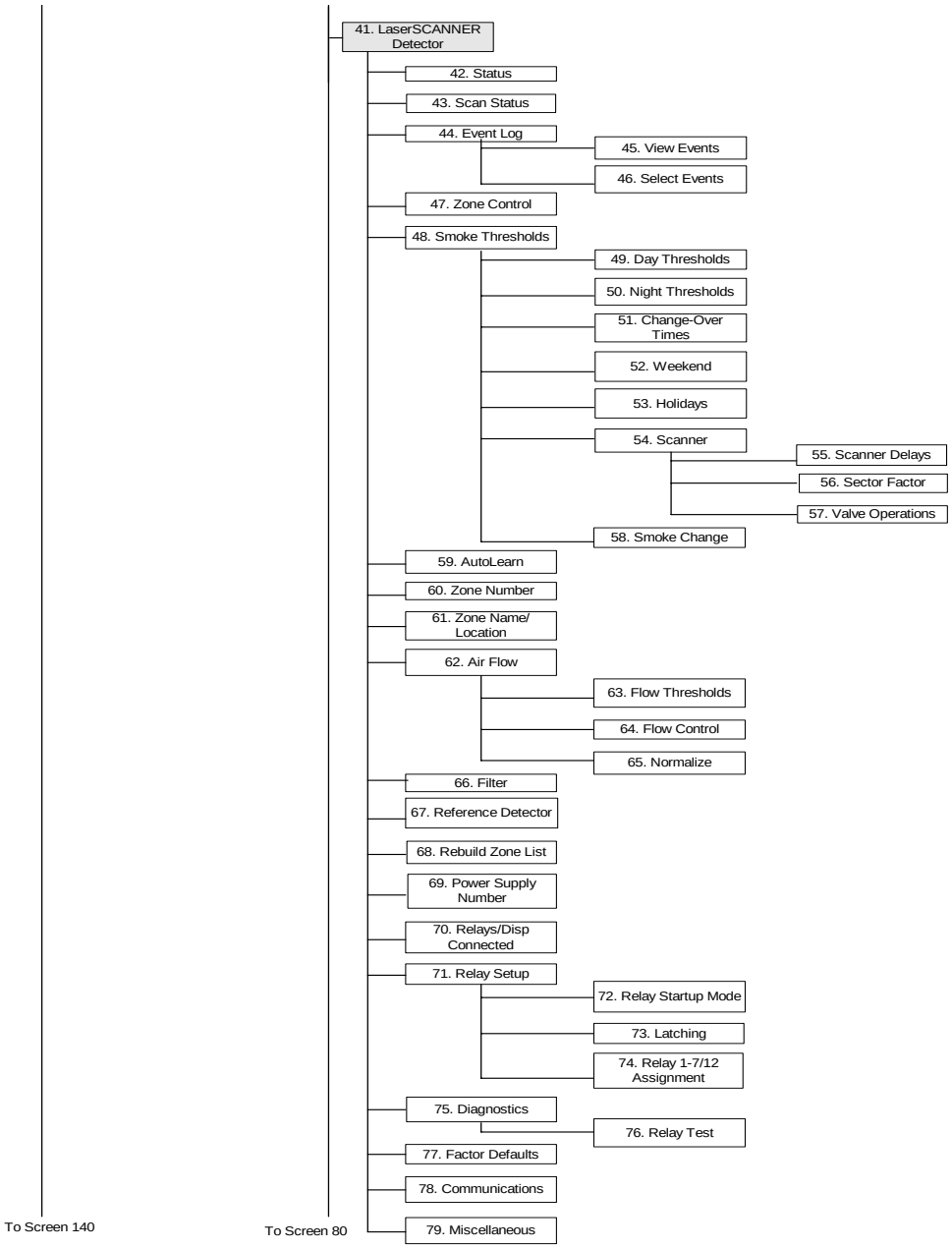

Figure 5 - The programmer menu 2 of 4

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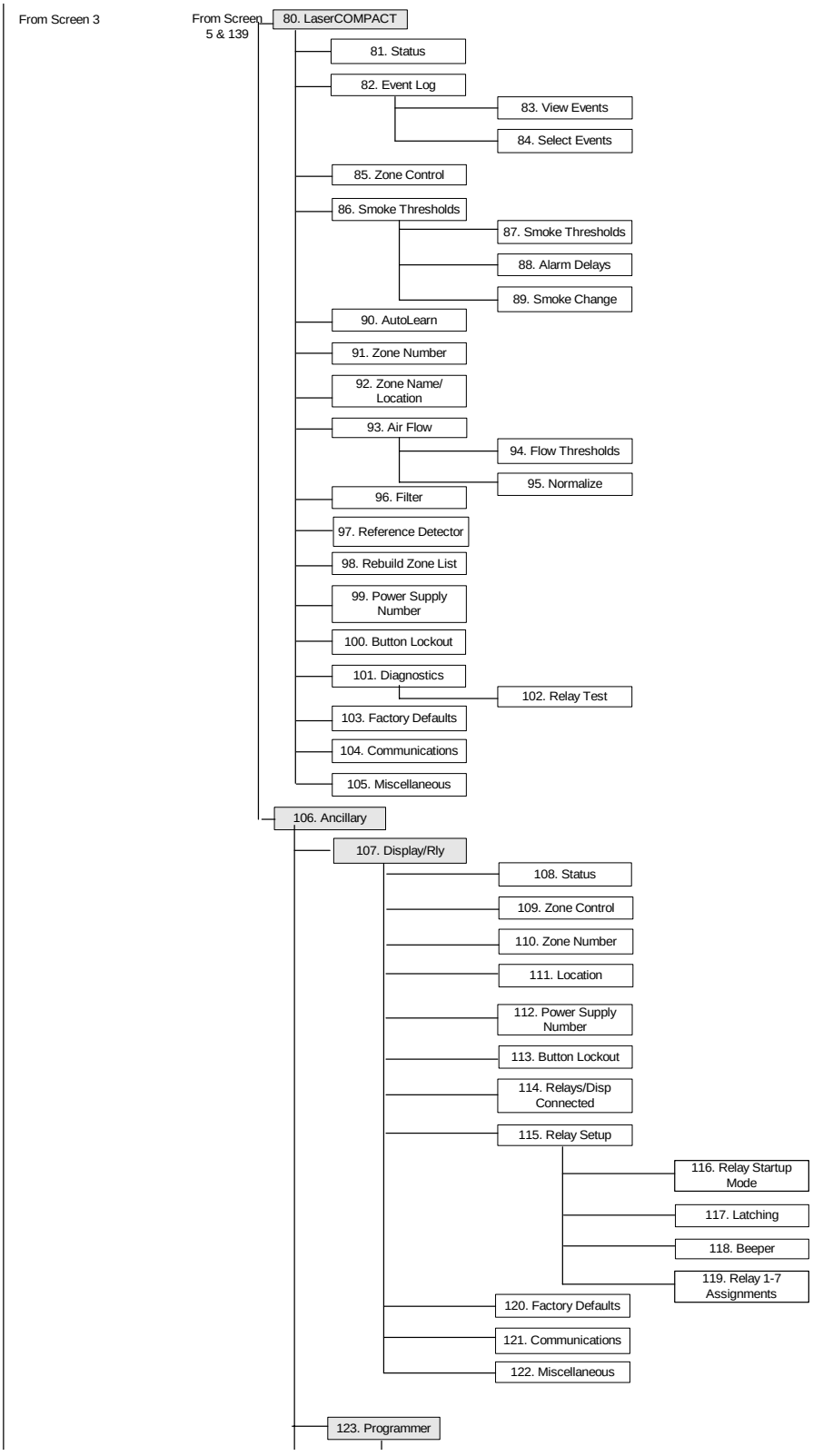

Figure 6 - The programmer menu 3 of 4

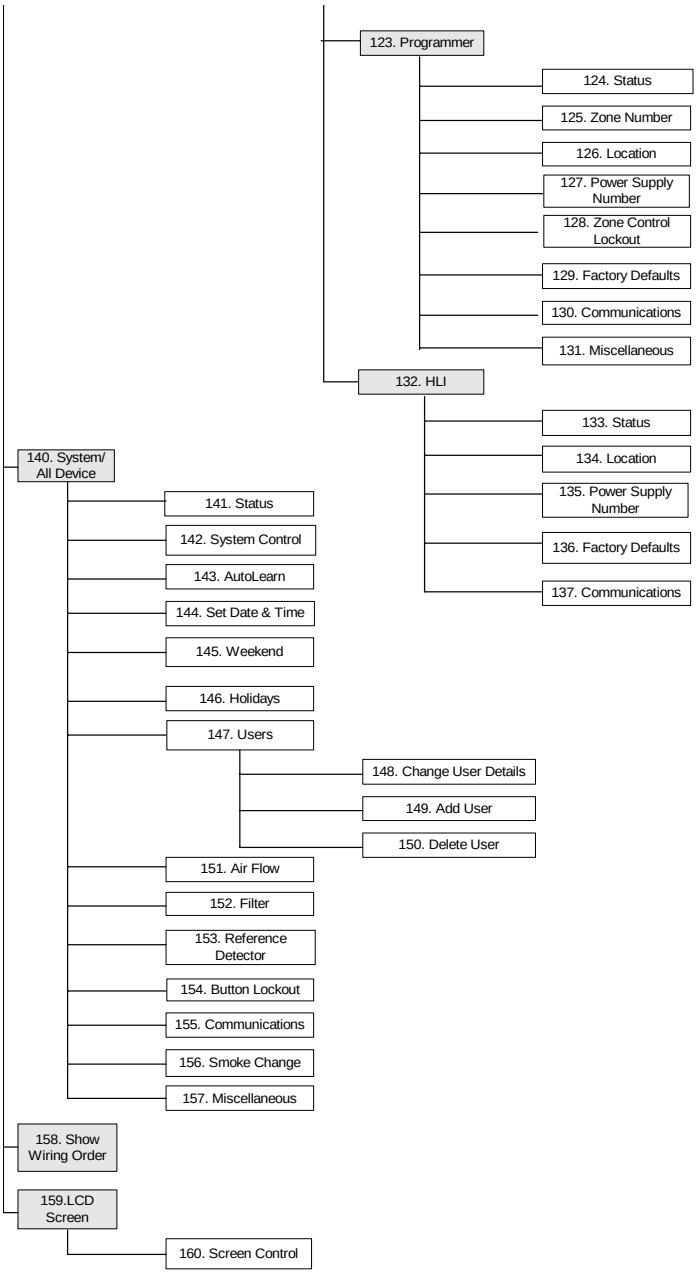

Figure 7 - The programmer menu 4 of 4

1.8 LCD Programmer Screen Description

Anyone with USR access is able to **read** the current values for all screens. The Minimum Access Level column shows the minimum level of access required to **change** a setting.

Scrn No.	Description	Min. Access Level
1.	**Main Menu** - This screen is displayed when the LCD Programmer is first powered up, or is in a standby mode. Press any key to go to the Logon Screen (Screen 2)	USR
2.	**Logon** - Use the ▲, ▼, + and - keys to enter the User. Use the ▶ and the ↵ keys to move the cursor to the PIN field. Use the + and - keys to enter the PIN	USR
3.	**VESDA LaserPLUS -** This screen displays options available for accessing and managing the parameters of VESDA Laser range of products connected to VESDAnet. The Options are: • Setup By Address • Setup By Type • System /All Devices • Show Wiring Order • LCD Screen	USR
4.	**Setup By Address (Setup By Zone) -** Once VESDA Zone numbers and names are allocated, this screen lists all the VESDA Zone numbers and names on VESDAnet. All devices without a VESDA Zone number are grouped in an unconfigured devices menu. The Ancillary devices include programmers, HLI, and SRMs.	USR
5.	**Address (Zone) Number and Name -** Lists all devices in the particular VESDA Zone.	USR
6.	**Address with a VESDA LaserPLUS Detector -** Lists functions available for accessing and managing the properties of the selected VESDA LaserPLUS detector. Select the required option and press ↵.	USR
7.	**Status** - Displays the current status of the Address • Smoke Level - Displays the current smoke level in the VESDA Zone • Alarms - If the detector is in alarm mode, the alarm stage is displayed • Faults - List of faults relating to the device • Isolated - The isolated status is reported if the detector has been isolated • Current % Flow - Reports the current percentage of air flow through the pipes • SW Version - Displays the version of software installed in the detector • Cfg Code - This is a configuration code set during production	USR
8.	**Event Log** - • View Events • Select Events	USR
9.	**View Events** - Lists a log of events	USR

<table>
<tr><th>Scrn No.</th><th>Description</th><th>Min. Access Level</th></tr>
<tr><td>10.</td><td>Select Events - This function assists in easier viewing of the logged events. The events can be sorted as per the categories displayed. After selecting the events, proceed to Screen 9 to view the events.
• End Date - This allows viewing of events up to the date mentioned in the date field. You can input the required date in the date field.
• End Time - This is the time up to which events will be displayed for viewing. You can input the required time in the time field.
• Events to view -
- Smoke Level - A ✔ against Smoke Level will display logged smoke levels
- Alarms - A ✔ against Alarms displays a log of alarms
- Faults - A ✔ against Faults displays a log of the logged faults
- User Action - To view a log of user actions place a ✔ against user action
- Clear Log - This function is only available with DST access. To clear the log of events highlight Start and press ↵.
Use the + key to place a ✔ and - key to insert a X and deselect the option.</td><td>ADM</td></tr>
<tr><td>11.</td><td>Zone Control - The four functions under Zone/Address control are the same as the functions performed by the buttons on the display module.
• Mode - This controls the mode of the Multi-Segment LCD display on any display connected to that zone. Use the +, -, and the ↵ keys to change the mode
- Sensitivity - Displays the sensitivity level of Fire 1
- Smoke - Displays the current smoke level
- Address Number - Displays the assigned Address number for the detector
• Silence - Silences the beeping sound of the detector
• Reset - Resets fire and fault conditions
• Isolate - Starts and stops isolation of the detector</td><td>USR</td></tr>
<tr><td>12.</td><td>Smoke Thresholds - This screen lists screens 13 to 19 as options available for setting smoke thresholds.</td><td>ADM</td></tr>
<tr><td>13.</td><td>Day Thresholds - This screen allows viewing and changing the current Fire 2, Fire 1, Action and Alert thresholds for day time.
<table>
<tr><th>Parameter</th><th>Default</th><th>Minimum</th><th>Maximum</th></tr>
<tr><td rowspan="2">Fire 2/Full Scale</td><td>2.000% obs/m</td><td>0.020% obs/m</td><td>20.000% obs/m</td></tr>
<tr><td>(0.625% obs/ft)</td><td>(0.0062% obs/ft)</td><td>(6.25% obs/ft)</td></tr>
<tr><td rowspan="2">Fire 1/Fire</td><td>0.200% obs/m</td><td>0.015% obs/m</td><td>2.000% obs/m</td></tr>
<tr><td>(0.0625% obs/ft)</td><td>(0.0046% obs/ft)</td><td>(0.6250% obs/ft)</td></tr>
<tr><td rowspan="2">Action/Pre/ Alarm</td><td>0.140% obs/m</td><td>0.010% obs/m</td><td>1.995% obs/m</td></tr>
<tr><td>(0.044% obs/ft)</td><td>(0.0031 obs/ft)</td><td>(0.6234% obs/ft</td></tr>
<tr><td rowspan="2">Alert</td><td>0.080% obs/m</td><td>0.005% obs/m</td><td>1.990% obs/m</td></tr>
<tr><td>(0.025% obs/ft)</td><td>(0.0015% obs/ft)</td><td>(0.6218% obs/ft)</td></tr>
</table></td><td>ADM</td></tr>
</table>

<table>
<tr><th>Scrn No.</th><th>Description</th><th>Min. Access Level</th></tr>
<tr><td>14.</td><td>Night Thresholds - This screen allows viewing and changing the current Fire 2, Fire 1, Action and Alert thresholds for night time.
<table>
<tr><td>Parameter</td><td>Default</td><td>Minimum</td><td>Maximum</td></tr>
<tr><td rowspan="2">Fire 2/Full Scale</td><td>2.000% obs/m</td><td>0.020% obs/m</td><td>20.000% obs/m</td></tr>
<tr><td>(0.625% obs/ft)</td><td>(0.0062% obs/ft)</td><td>(6.25% obs/ft)</td></tr>
<tr><td rowspan="2">Fire 1/Fire</td><td>0.200% obs/m</td><td>0.015% obs/m</td><td>2.000% obs/m</td></tr>
<tr><td>(0.0625% obs/ft)</td><td>(0.0046% obs/ft)</td><td>(0.6250% obs/ft)</td></tr>
<tr><td rowspan="2">Action/Pre/ Alarm</td><td>0.140% obs/m</td><td>0.010% obs/m</td><td>1.995% obs/m</td></tr>
<tr><td>(0.044% obs/ft)</td><td>(0.0031 obs/ft)</td><td>(0.6234% obs/ft</td></tr>
<tr><td rowspan="2">Alert</td><td>0.080% obs/m</td><td>0.005% obs/m</td><td>1.990% obs/m</td></tr>
<tr><td>(0.025% obs/ft)</td><td>(0.0015% obs/ft)</td><td>(0.6218% obs/ft)</td></tr>
</table></td><td>ADM</td></tr>
<tr><td>15.</td><td>Alarm Delays - In this screen insert the required time delay (in seconds) before an alarm is generated at Fire 2, Fire 1, Action, or Alert level. This screen also offers the option of simultaneous or cumulative delay times before the alarm is generated. The instant fire alarm option can be enabled or disabled in this screen.
<table>
<tr><th>Parameter</th><th>Default</th><th>Minimum</th><th>Maximum</th></tr>
<tr><td>Fire 2/Full Scale</td><td>10 seconds</td><td>0 seconds</td><td>60 seconds</td></tr>
<tr><td>Fire 1/Fire</td><td>10 seconds</td><td>0 seconds</td><td>60 seconds</td></tr>
<tr><td>Action/Pre/Alarm</td><td>10 seconds</td><td>0 seconds</td><td>60 seconds</td></tr>
<tr><td>Alert</td><td>10 seconds</td><td>0 seconds</td><td>60 seconds</td></tr>
<tr><td>Delay Times</td><td>Simultaneous</td><td>Simultaneous</td><td>Cumulative</td></tr>
<tr><td>Instantaneous Fire</td><td>Disabled</td><td>Enabled</td><td>Disabled</td></tr>
</table></td><td>ADM</td></tr>
<tr><td>16.</td><td>Change-Over Times - Insert the time to switch from day to night thresholds and night to day thresholds. By default day start and night start have been set at 07:00:00 and 19:00:00 respectively.</td><td>ADM</td></tr>
<tr><td>17.</td><td>Weekend - Placing a ✔ against the relevant week day will denote it as being weekend. By default Saturday and Sunday are set as weekend days.</td><td>ADM</td></tr>
<tr><td>18.</td><td>Holidays - Insert the first and the last day of holidays to set the different smoke thresholds during this period.</td><td>ADM</td></tr>
</table>

<table>
<tr><th>Scrn No.</th><th>Description</th><th>Min. Access Level</th></tr>
<tr><td>19.</td><td>Smoke Change - The change in obscuration rate mentioned here will register the event in the event log. This is subject to the change occurring over the interval period that is input. You can input the required obscuration and interval.
• Change By
• Min. Interval
<table>
<tr><th>Parameter</th><th>Default</th><th>Minimum</th><th>Maximum</th></tr>
<tr><td rowspan="2">Fire 2/Full Scale</td><td>0.02% obs/m</td><td>0.005% obs/m</td><td>0.2% obs/m</td></tr>
<tr><td>(0.0062% obs/ft)</td><td>(0.0015% obs/ft)</td><td>(0.0625% obs/ft)</td></tr>
<tr><td>Min. Interval</td><td>2 seconds</td><td>2 seconds</td><td>10 seconds</td></tr>
</table></td><td>ADM
DST</td></tr>
<tr><td>20.</td><td>AutoLearn - The AutoLearn function will automatically set the fire thresholds. The detector measures the ambient smoke level over the set period and will establish the smoke and alarm thresholds accordingly. Enter the number of days, hours and minutes over which the AutoLearn function is to apply.
<table>
<tr><th>Parameter</th><th>Default</th><th>Minimum</th><th>Maximum</th></tr>
<tr><td rowspan="3">AutoLearn</td><td>14 days</td><td>0 days</td><td>15 days</td></tr>
<tr><td>0 hours</td><td>0 hours</td><td>23 hours</td></tr>
<tr><td>0 minutes</td><td>15 minutes</td><td>59 minutes</td></tr>
</table></td><td>ADM</td></tr>
<tr><td>21.</td><td>Address Number - Assign the VESDA Zone number to the detector.</td><td>ADM</td></tr>
<tr><td>22.</td><td>Address Name/Location - Allocate a VESDA Zone name and location and assign these to the respective detector.</td><td>ADM</td></tr>
<tr><td>23.</td><td>Air Flow - This screen lists the options available to monitor and manage air flows.
• Flow Thresholds
• Flow Control
• Normalize</td><td>ADM</td></tr>
<tr><td>24.</td><td>Flow Thresholds - Input the required High Urgent, High Minor, Low Minor and Low Urgent air flow thresholds. Enter the time over which the air flow should be monitored above and below the threshold levels. An appropriate urgent or minor air flow fault will be generated once the air flow crosses the threshold and remains above or below the threshold for the period set as “Delay”.
<table>
<tr><th>Parameter</th><th>Default</th><th>Minimum</th><th>Maximum</th></tr>
<tr><td>High Urgent</td><td>130%</td><td>105%</td><td>200%</td></tr>
<tr><td>High Minor</td><td>120%</td><td>105%</td><td>200%</td></tr>
<tr><td>Low Minor</td><td>80%</td><td>25%</td><td>95%</td></tr>
<tr><td>Low Urgent</td><td>70%</td><td>25%</td><td>95%</td></tr>
<tr><td>Delay</td><td>0 seconds</td><td>0 seconds</td><td>60 seconds</td></tr>
</table></td><td>ADM</td></tr>
</table>

<table>
<tr><th>Scrn No.</th><th>Description</th><th>Min. Access Level</th></tr>
<tr><td>25.</td><td>Flow Control - Allows you to change the aspirator speed for VESDA LaserPLUS and LaserSCANNER. Enter the pipes in use by placing a ✔ against the respective pipe. Default: 3000rpm, Min. 3000rpm, Max 4200rpm</td><td>ADM</td></tr>
<tr><td>26.</td><td>Normalize - The Normalize screen displays the current air flow rates and the current raw flow for each pipe in use. To normalize the air flow highlight Start and press ↵.

Note: Normalizing air flow takes approximately 11 minutes. Ensure that the pipes in use have been ✔ (screen 25) before commencing normalization.</td><td>ADM</td></tr>
<tr><td>27.</td><td>Filter - Displays details on the life and usage of the filter. When the filter is replaced with a new filter, highlight Start and press ↵ to restart the dust count and due date for replacement. The service interval for filter replacements can be entered to suit the ambient conditions of the VESDA Zone in which the detector is installed.

• Life Used
• Date Due
• Service Interval
• New Filter
• Dust Count
• Dust Limit

Default: 1825 days (5 years), Min. 1 day, Max 3655 days (10 years)</td><td>ADM
DST</td></tr>
<tr><td>28.</td><td>Reference Detector - If a reference detector is connected to VESDAnet, enter the:

• Reference Address Number
• Dilution Factor - This is the factor by which the background levels have to reduce to reach the levels of the current VESDA Zone
• Delay - This is the time taken for the current VESDA Zone to return to its ambient levels after background from the Reference Address is introduced.

<table><tr><th>Parameter</th><th>Default</th><th>Minimum</th><th>Maximum</th></tr><tr><td>Reference Address No</td><td>255</td><td>Selectable</td><td>Selectable</td></tr><tr><td>Dilution</td><td>100%</td><td>1%</td><td>100%</td></tr><tr><td>Delay</td><td>2 minutes</td><td>0 minutes</td><td>15 minutes</td></tr></table></td><td>ADM</td></tr>
<tr><td>29.</td><td>Rebuild Address List - Highlight Start and press ↵ to rebuild the Address List. Use this option to rebuild the Address List after removing a display module assigned to the detector.</td><td>ADM</td></tr>
<tr><td>30.</td><td>Power Supply Number - Input the number of the power supply that is assigned to the detector. If the Intelligent Power Supply is not being used enter “0”.</td><td>ADM</td></tr>
<tr><td>31.</td><td>Relays/Disp Connected - This screen displays the number of relays connected to the detector. It also indicates if the detector is a LaserSCANNER.

Default: None (display only), Min./Max Selectable</td><td>ADM</td></tr>
<tr><td>32.</td><td>Relay Setup - This screen and its sub-menus allow setting up the assignment of functions to the relays and to energize or de-energize the relays.</td><td>ADM</td></tr>
</table>

<table>
<tr><th>Scrn No.</th><th>Description</th><th>Min. Access Level</th></tr>
<tr><td>33.</td><td>Relay Startup Mode - Displays the energize/de-energized condition for each relay. If required, use the + - and ↵ keys to change the energized/de-energized state of relays.
<table>
<tr><th>Parameter</th><th>Default</th></tr>
<tr><td>Relay Startup Mode</td><td></td></tr>
<tr><td>Relay 2 & 3 energized</td><td>Energized</td></tr>
<tr><td>Relays 1, 4-7 (4-12)</td><td>Energized</td></tr>
</table></td><td>ADM</td></tr>
<tr><td>34.</td><td>Latching - This screen displays the latched/unlatched relay condition for different levels of alarms and faults. In the latched condition the reporting of an alarm or a fault continues to be reported even after the event is over. Manual intervention is necessary to reset. If the condition is unlatched the reporting of the condition automatically stops once the event is over. To latch an alarm or a fault place a ✔ against the respective alarm level or fault. The isolate function is fixed for unlatched and cannot be changed.
<table>
<tr><th>Parameter</th><th>Default</th></tr>
<tr><td>Latching</td><td></td></tr>
<tr><td>Sector (1-4)</td><td>N/A</td></tr>
<tr><td>Fire 2</td><td>Latched</td></tr>
<tr><td>Fire 1</td><td>Latched</td></tr>
<tr><td>Alert</td><td>Latched</td></tr>
<tr><td>Scanning</td><td>N/A</td></tr>
<tr><td>Urgent Fault</td><td>Latched</td></tr>
<tr><td>Minor Fault</td><td>Latched</td></tr>
<tr><td>Isolate</td><td>Unlatched</td></tr>
</table></td><td>ADM</td></tr>
</table>

<table>
<tr><th>Scrn No.</th><th>Description</th><th>Min. Access Level</th></tr>
<tr><td>35.</td><td>Relay Assignments - Each relay is allocated a screen. In their respective screens assign the relevant alarm, fault or isolate function. Multiple functions can be assigned to each relay. Relay 3 and relay 6 are permanently assigned to Urgent Fault and Fire 1 functions respectively. Additional functions may be assigned to Relays 3 and 6. Use the ↵ key to assign or de-assign functions.
<table>
<tr><th>Parameter</th><th>Default</th></tr>
<tr><td>Fire 2</td><td>Relay 7</td></tr>
<tr><td>Fire 1</td><td>Relay 6</td></tr>
<tr><td>Action</td><td>Relay 5</td></tr>
<tr><td>Alert</td><td>Relay 4</td></tr>
<tr><td>Urgent Fault</td><td>Relay 3</td></tr>
<tr><td>Minor Fault</td><td>Relay 2</td></tr>
<tr><td>Isolate</td><td>Relay 1</td></tr>
</table></td><td>ADM</td></tr>
<tr><td>36.</td><td>Diagnostics - It is possible to conduct alarm and fault tests through sub-menus of this screen.
• Alarm Test - This causes the detector to generate a Fire 2 condition
• Fault Test - This causes a system fault for 30 seconds
• Flow Fault - This turns the aspirator off for 30 seconds causing an air flow fault
• Relay Test - (Refer to Screen 37).</td><td>ADM</td></tr>
<tr><td>37.</td><td>Relay Test - This allows testing each relay by turning it ON and OFF.</td><td>ADM</td></tr>
<tr><td>38.</td><td>Factory Defaults -
• Factory Defaults - To restore factory defaults, highlight Restore and press ↵.
• Defaults OK - Highlighting Start and pressing ↵ will acknowledge Factory Default settings and clear faults 12, 30, 31, 33, 34, 35, 38, 57, 68 and 72.</td><td>DST
ADM</td></tr>
<tr><td>39.</td><td>Communications - The Communications screen allows settings for:
• Net Delay - This function sets the maximum time for a message to travel around the network and return to the originating device. If the message does not return within the prescribed time, it is presumed lost and will be resent
• Pref. Port - This allows you to assign a preferred port for communication
• Health Check - This function sets the frequency of health-check messages sent around the system
• Open-ended - In an open-ended VESDAnet loop select the port that is not connected to the VESDAnet loop.
<table>
<tr><th>Parameter</th><th>Default</th><th>Minimum</th><th>Maximum</th></tr>
<tr><td>Network delay</td><td>15 seconds</td><td>10 seconds</td><td>45 seconds</td></tr>
<tr><td>Preferred port</td><td>A</td><td>N/A</td><td>N/A</td></tr>
<tr><td>Health check</td><td>45 seconds</td><td>40 seconds</td><td>60 seconds</td></tr>
<tr><td>Open - ended</td><td>none</td><td>N/A</td><td>N/A</td></tr>
</table></td><td>DST</td></tr>
</table>

<table>
<tr><th>Scrn No.</th><th>Description</th><th>Min. Access Level</th></tr>
<tr><td>40.</td><td>Miscellaneous -
• UL Version - A ✔ against this indicates that the device is set to meet UL specifications.
• Latch Alarms - This provides a YES/NO option to latch/unlatch all Alarms
• Latch Faults - This provides a YES/NO option to latch/unlatch all Faults
• GP Input - The GP Input permits setting the general purpose input functions. For details on GPI functions please refer to the VESDA LaserPLUS Detector Guide.
<table><tr><th>Parameter</th><th>Default</th></tr><tr><td>UL Version</td><td>Enabled</td></tr><tr><td>Latch Alarm</td><td>Enabled</td></tr><tr><td>Latch Fault</td><td>Enabled</td></tr></table></td><td>ADM
DST</td></tr>
<tr><td>41.</td><td>LaserSCANNER Detector - Lists functions available for accessing and managing the properties of the selected VESDA LaserSCANNER detector. Select the required option and press ↵.</td><td>USR</td></tr>
<tr><td>42.</td><td>Status - Displays the current Status of the Address
• Smoke Level - Displays the current smoke level in the VESDA Zone
• Alarms - If the VESDA Detector is in alarm mode, the alarm stage is displayed
• Faults - List of faults generated for each device assigned to the Address
• Isolated - The isolated status is reported if the detector has been isolated
• Current% Flow - Reports the current percentage of air flow through each pipe
• SW Version - Displays the Software Version in the detector
• Cfg Code - This is a configuration code set during production</td><td>USR</td></tr>
<tr><td>43.</td><td>Scan Status - This screen shows the smoke level for each sector in use during a scan sequence (automatic or manual).</td><td>USR</td></tr>
<tr><td>44.</td><td>Event Log -
• View Events
• Select Events</td><td>USR</td></tr>
<tr><td>45.</td><td>View Events - Lists a log of events</td><td>USR</td></tr>
</table>

<table>
<tr><th>Scrn No.</th><th>Description</th><th>Min. Access Level</th></tr>
<tr><td>46.</td><td>Select Events - This function assists in easier viewing of the logged events. The events can be sorted as per the categories displayed. After selecting the events, proceed to Screen 45 to view the events.
• End Date - This allows viewing of events up to the date mentioned in the date field. You can input the required date in the date field.
• End Time - This is the time up to which events will be displayed for viewing. You can input the required time in the time field.
• Events to view -
- Smoke Level - A ✔ against Smoke Level will display logged smoke levels
- Alarms - A ✔ against Alarms displays a log of alarms
- Faults - IA ✔ against Faults displays a log of the logged faults
- User Action - To view a log of user actions place a ✔ against User Action
- Clear Log - To clear the log of events highlight Start and press ↵.

Note: Use the + key to place a ✔ and - key to insert a x to deselect the option.

<table><tr><th>Parameter</th><th>Default</th></tr><tr><td>Select Events
end date
end time</td><td>
Selectable
Selectable</td></tr><tr><td>Events to View
Smoke Level
Alarms
Faults
User Action</td><td>
Enabled
Enabled
Enabled
Enabled</td></tr></table></td><td>ADM
DST</td></tr>
<tr><td>47.</td><td>Address Control - The four functions under Address Control are the same as the functions performed by the buttons on the VESDA Laser Display Module.
• Mode - This controls the mode of the LCD Numerical display on the VESDA Laser Display. Use the +, -, and the ↵ keys to change the mode
- Sensitivity - Displays the sensitivity level
- Smoke - Displays the current smoke level
- Address Number - Displays the assigned VESDA Zone number for the detector
- Current Sector - Displays the First Alarm Sector in a VESDA LaserSCANNER Detector
• Silence - Silences the beeping sound of the detector
• Reset - Resets faults
• Isolate - Starts and stops isolation of the detector</td><td>USR</td></tr>
<tr><td>48.</td><td>Smoke Thresholds - This screen lists screens 49 to 58 as options available for setting Smoke Thresholds.</td><td>ADM</td></tr>
<tr><td>49.</td><td>Day Thresholds - This screen allows viewing and changing the current Fire 2, Fire 1, Action and Alert thresholds for day time.</td><td>ADM</td></tr>
</table>

<table>
<tr><th>Scrn No.</th><th>Description</th><th>Min. Access Level</th></tr>
<tr><td>50.</td><td>Night Thresholds - This screen allows viewing and changing the current Fire 2, Fire 1, Action and Alert thresholds for night time.
<table>
<tr><th>Parameter</th><th>Default</th><th>Minimum</th><th>Maximum</th></tr>
<tr><td rowspan="2">Fire 2</td><td>2.000% obs/m</td><td>0.020% obs/m</td><td>20.000% obs/m</td></tr>
<tr><td>(0.625% obs/ft)</td><td>(0.0062% obs/ft)</td><td>(6.25% obs/ft)</td></tr>
<tr><td rowspan="2">Fire 1</td><td>0.200% obs/m</td><td>0.015% obs/m</td><td>2.000% obs/m</td></tr>
<tr><td>(0.0625% obs/ft)</td><td>(0.0046% obs/ft)</td><td>(0.6250% obs/ft)</td></tr>
<tr><td rowspan="2">Action/Pre/ Alarm</td><td>0.140% obs/m</td><td>0.010% obs/m</td><td>1.995% obs/m</td></tr>
<tr><td>(0.044% obs/ft)</td><td>(0.0031 obs/ft)</td><td>(0.6234% obs/ft</td></tr>
<tr><td rowspan="2">Alert</td><td>0.080% obs/m</td><td>0.005% obs/m</td><td>1.990% obs/m</td></tr>
<tr><td>(0.025% obs/ft)</td><td>(0.0015% obs/ft)</td><td>(0.6218% obs/ft)</td></tr>
</table></td><td>ADM</td></tr>
<tr><td>51.</td><td>Change-Over Times - Insert the time to switch from day to night thresholds and night to day thresholds. Day Start and Night Start have been defaulted at 07:00:00 and 19:00:00 respectively.</td><td>ADM</td></tr>
<tr><td>52.</td><td>Weekend - Placing a ✔ against the relevant week day will denote it as being weekend. By default Saturday and Sunday are set as weekend days.</td><td>ADM</td></tr>
<tr><td>53.</td><td>Holidays - Insert the first and the last day of holidays to set the night fire thresholds during this period.</td><td>ADM</td></tr>
<tr><td>54.</td><td>Scanner - The Scanner Menu has 3 sub-menus for:
• Scanner Delays & Thresholds
• Sector Factor (Sectors 1 to 4)
• Valve Operations</td><td>USR</td></tr>
</table>

<table>
<tr><th>Scrn No.</th><th>Description</th><th>Min. Access Level</th></tr>
<tr><td>55.</td><td>Delays & Thresholds - This screen displays the delays and thresholds for the LaserSCANNER.
- Delays - The time before a LaserSCANNER will commence scanning, once the lowest threshold is reached.
- Sector Time - The time spent looking at each sector after the initial fast scan sequence. This allows air sample from a previous pipe to clear out from the detector before it starts reading the air sample from the next pipe.
- Thresholds - The smoke threshold for the LaserSCANNER
- Day Threshold - The day smoke threshold for the LaserSCANNER
- Night Threshold - The night smoke threshold for the LaserSCANNER
<table>
<tr><th>Parameter</th><th>Default</th><th>Minimum</th><th>Maximum</th></tr>
<tr><td>Delay</td><td>3 seconds</td><td>0 seconds</td><td>10 seconds</td></tr>
<tr><td>Sector Time</td><td>10 seconds</td><td>8 seconds</td><td>15 seconds</td></tr>
<tr><td rowspan="2">Threshold</td><td>0.02% obs/m</td><td></td><td></td></tr>
<tr><td>(0.0062% obs/ft)</td><td></td><td></td></tr>
<tr><td rowspan="2">Day Threshold</td><td>0.02% obs/m</td><td></td><td></td></tr>
<tr><td>(0.0062% obs/ft)</td><td></td><td></td></tr>
<tr><td rowspan="2">Night Threshold</td><td>0.02% obs/m</td><td></td><td></td></tr>
<tr><td>(0.0062% obs/ft)</td><td></td><td></td></tr>
</table>
</td><td>ADM</td></tr>
</table>

<table>
<tr><th>Scrn No.</th><th>Description</th><th>Min. Access Level</th></tr>
<tr><td>56.</td><td>

Sector Factor (Sectors 1 to 4) -

- Sector Factor - Set the sector factor between 0.5 and 2

<table>
<tr><th>Parameter</th><th>Default</th><th>Minimum</th><th>Maximum</th></tr>
<tr><td>Factor</td><td>1.000</td><td>0.500</td><td>2.000</td></tr>
</table>

- Day Time Thresholds for:
  - Fire2
  - Fire 1
  - Action
- Alert
- Night Time Thresholds for:
  - Fire2
  - Fire 1
  - Action
  - Alert

Note: The Alarm Thresholds change automatically according to the entered Sector Factor.

<table>
<tr><th>Parameter</th><th>Default</th><th>Minimum</th><th>Maximum</th></tr>
<tr><td rowspan="2">Fire 2</td><td>2.000% obs/m</td><td>0.020% obs/m</td><td>20.000% obs/m</td></tr>
<tr><td>(0.625% obs/ft)</td><td>(0.0062% obs/ft)</td><td>(6.25% obs/ft)</td></tr>
<tr><td rowspan="2">Fire 1</td><td>0.200% obs/m</td><td>0.015% obs/m</td><td>2.000% obs/m</td></tr>
<tr><td>(0.0625% obs/ft)</td><td>(0.0046% obs/ft)</td><td>(0.6250% obs/ft)</td></tr>
<tr><td rowspan="2">Action/</td><td>0.140% obs/m</td><td>0.010% obs/m</td><td>1.995% obs/m</td></tr>
<tr><td>(0.044% obs/ft)</td><td>(0.0031 obs/ft)</td><td>(0.6234% obs/ft</td></tr>
<tr><td rowspan="2">Alert</td><td>0.080% obs/m</td><td>0.005% obs/m</td><td>1.990% obs/m</td></tr>
<tr><td>(0.025% obs/ft)</td><td>(0.0015% obs/ft)</td><td>(0.6218% obs/ft)</td></tr>
</table>

</td><td>ADM</td></tr>
<tr><td>57.</td><td>

Valve Operations -

- Total Operations (for each sector)
- Operations This Week (for each sector)

</td><td>USR</td></tr>
<tr><td>58.</td><td>

Smoke Change - The change in obscuration rate mentioned here will register the event in the event log. This is subject to the change occurring over the interval period that is input. You can input the required obscuration and interval.

- Change By
- Min. Interval

<table>
<tr><th>Parameter</th><th>Default</th><th>Minimum</th><th>Maximum</th></tr>
<tr><td>Change by</td><td>0.02%</td><td>0.005%</td><td>0.2% obs/ft</td></tr>
<tr><td>Min. Interval</td><td>2 seconds</td><td>2 seconds</td><td>10 seconds</td></tr>
</table>

</td><td>ADM
DST</td></tr>
</table>

<table>
<tr><th>Scrn No.</th><th>Description</th><th>Min. Access Level</th></tr>
<tr><td>59.</td><td>AutoLearn - The AutoLearn function allows setting the thresholds automatically. The detector measures the ambient smoke levels over the set period and will establish the smoke and alarm thresholds accordingly. Enter the number of days, hours and minutes over which the AutoLearn function is to apply.
<table>
<tr><th>Parameter</th><th>Default</th><th>Minimum</th><th>Maximum</th></tr>
<tr><td rowspan="3">AutoLearn</td><td>14 days</td><td>0 days</td><td>15 days</td></tr>
<tr><td>0 hours</td><td>0 hours</td><td>23 hours</td></tr>
<tr><td>0 minutes</td><td>15 minutes</td><td>59 minutes</td></tr>
</table></td><td>ADM</td></tr>
<tr><td>60.</td><td>Address Number - Assign the VESDA Zone number to the detector.</td><td>ADM</td></tr>
<tr><td>61.</td><td>Address Name/Location - Allocate a VESDA Zone name and location and assign these to the respective detector.</td><td>ADM</td></tr>
<tr><td>62.</td><td>Air Flow - This screen lists the options available to monitor and manage air flows. It has 3 sub-menus for:
• Flow Thresholds
• Flow Control
• Normalize</td><td>ADM</td></tr>
<tr><td>63.</td><td>Flow Thresholds - Input the required High Urgent, High Minor, Low Minor and Low Urgent air flow thresholds. Enter the time over which the air flow should be monitored above and below the threshold levels. An appropriate urgent or minor air flow fault will be generated once the air flow crosses the threshold and remains above or below the threshold for the period set as “Delay”.
<table>
<tr><th>Parameter</th><th>Default</th><th>Minimum</th><th>Maximum</th></tr>
<tr><td>High Urgent</td><td>130%</td><td>105%</td><td>200%</td></tr>
<tr><td>High Minor</td><td>120%</td><td>105%</td><td>200%</td></tr>
<tr><td>Low Minor</td><td>80%</td><td>25%</td><td>95%</td></tr>
<tr><td>Low Urgent</td><td>70%</td><td>25%</td><td>95%</td></tr>
<tr><td>Delay</td><td>0 seconds</td><td>0 seconds</td><td>60 seconds</td></tr>
</table></td><td>ADM</td></tr>
<tr><td>64.</td><td>Flow Control - The Flow Control Screen permits changing the Aspirator speed for VESDA LaserPLUS and LaserSCANNER. Enter the Pipes in Use by placing a ✔ against the respective pipe.
Default: 3000rpm, Min. 3000rpm, Max 4200rpm</td><td>ADM</td></tr>
<tr><td>65.</td><td>Normalize - The Normalize screen displays the current air flow rates and the current raw flow for each pipe in use. To normalize the air flow highlight Start and press ↵.
Note: Normalizing air flow takes approximately 11 minutes. Ensure that the pipes in use have been ✔ (screen 64) before commencing normalization.</td><td>ADM</td></tr>
</table>

<table>
<tr><th>Scrn No.</th><th>Description</th><th>Min. Access Level</th></tr>
<tr><td>66.</td><td>Filter - Displays details on the life and usage of the filter. When the filter is replaced with a new filter, highlight Start and press ↵ to restart the dust count and due date for replacement. The service interval for filter replacements can be entered to suit the ambient conditions of the VESDA Zone in which the detector is installed.
• Life Used
• Date Due
• Service Interval
• New Filter
• Dust Count
• Dust Limit
Default: 1825 days (5 years), Min. 1 day, Max 3655 days (10 years)</td><td>ADM
DST
DST</td></tr>
<tr><td>67.</td><td>Reference Detector - If a reference detector is connected to VESDAnet, enter the:
• Reference Address Number
• Dilution Factor - This is the amount of offset required from the reference detector. Setting it to 100% will cause the detector to ignore the same amount of smoke as is being detected by the reference detector. Setting it to 50% ignores half of the smoke detected at the reference detector. These settings allow you to fine tune how much of the smoke detected by the reference detector is also likely to reach each detector.
• Delay - The amount of time it will take smoke to move from the reference detector to the other detectors.
<table>
<tr><th>Parameter</th><th>Default</th><th>Minimum</th><th>Maximum</th></tr>
<tr><td>Reference Address No</td><td>255</td><td>Selectable</td><td>Selectable</td></tr>
<tr><td>Dilution</td><td>100%</td><td>1%</td><td>100%</td></tr>
<tr><td>Delay</td><td>2 minutes</td><td>0 minutes</td><td>15 minutes</td></tr>
</table></td><td>ADM</td></tr>
<tr><td>68.</td><td>Rebuild Address List - Highlight Start and press ↵ to rebuild the Address List. Use this option to rebuild the Address List after removing a display module assigned to the VESDA Detector.</td><td>ADM</td></tr>
<tr><td>69.</td><td>Power Supply Number - Input the number of the power supply that is assigned to the detector. If the VESDA Intelligent Power Supply is not being used enter “0”.</td><td>ADM</td></tr>
<tr><td>70.</td><td>Relays/Disp Connected - This screen displays the number of relays connected to the detector. It also indicates if the detector is a LaserSCANNER.
<table>
<tr><th>Parameter</th><th>Default</th></tr>
<tr><td>Relay card</td><td>None
(Display only - 7/12 relay fitted)</td></tr>
</table></td><td>ADM</td></tr>
<tr><td>71.</td><td>Relay Setup - This screen and its sub-menus allow setting up the assignment of functions to the relays and to energize or de-energize relays.</td><td>ADM</td></tr>
</table>

<table>
<tr><th>Scrn No.</th><th>Description</th><th>Min. Access Level</th></tr>
<tr><td>72.</td><td>Relay Startup Mode - Displays the energize/de-energized condition for each relay. If required, use the + - and press ↵ keys to change the energized/de-energized state of relays.
<table>
<tr><th>Parameter</th><th>Default</th></tr>
<tr><td>Relay Startup Mode</td><td></td></tr>
<tr><td>Relay 2 & 3 energized</td><td>Energized</td></tr>
<tr><td>Relays 1, 4-7 (4-12)</td><td>De-energized</td></tr>
</table></td><td>ADM</td></tr>
<tr><td>73.</td><td>Latching - This screen displays the latched/unlatched relay condition for different levels of alarms in each sector, faults and scanning. In the latched condition the reporting of an alarm or a fault continues to be reported even after the event is over. Manual intervention is necessary to reset. If the condition is unlatched the reporting of the condition automatically stops once the event is over. To latch an alarm or a fault place a ✔ against the respective alarm level or fault. The isolate function is fixed for unlatched and cannot be changed.
<table>
<tr><th>Parameter</th><th>Default</th></tr>
<tr><td>Latching</td><td></td></tr>
<tr><td>Sector (1-4)</td><td>N/A</td></tr>
<tr><td>Fire 2</td><td>Latched</td></tr>
<tr><td>Fire 1</td><td>Latched</td></tr>
<tr><td>Alert</td><td>Latched</td></tr>
<tr><td>Scanning</td><td>N/A</td></tr>
<tr><td>Urgent Fault</td><td>Latched</td></tr>
<tr><td>Minor Fault</td><td>Latched</td></tr>
<tr><td>Isolate</td><td>Unlatched</td></tr>
</table></td><td>ADM</td></tr>
</table>

<table>
<tr><th>Scrn No.</th><th>Description</th><th>Min. Access Level</th></tr>
<tr><td>74.</td><td>Relay Assignments - Each relay is allocated a screen. In their respective screens assign the relevant alarm, fault, scanning or isolate function. Multiple functions can be assigned to each relay. Relay 3 and relay 6 are permanently assigned to Urgent Fault and Fire 1 functions respectively. Additional functions may be assigned to Relays 3 and 6. Use the ↵ key to assign or de-assign functions.
<table>
<tr><th>Parameter</th><th>Default</th></tr>
<tr><td>Scanning</td><td>Relay 12</td></tr>
<tr><td>Sector 4</td><td>Relay 11</td></tr>
<tr><td>Sector 3</td><td>Relay 10</td></tr>
<tr><td>Sector 2</td><td>Relay 9</td></tr>
<tr><td>Sector 1</td><td>Relay 8</td></tr>
<tr><td>Fire 2</td><td>Relay 7</td></tr>
<tr><td>Fire 1</td><td>Relay 6</td></tr>
<tr><td>Action</td><td>Relay 5</td></tr>
<tr><td>Alert</td><td>Relay 4</td></tr>
<tr><td>Urgent Fault</td><td>Relay 3</td></tr>
<tr><td>Minor Fault</td><td>Relay 2</td></tr>
<tr><td>Isolate</td><td>Relay 1</td></tr>
</table></td><td>ADM</td></tr>
<tr><td>75.</td><td>Diagnostics - It is possible to conduct alarm and fault tests through sub-menus of this screen.
• Alarm Test - This causes the detector to generate a Fire 2 condition
• Fault Test - This causes a system fault for 30 seconds
• Flow Fault - This causes a 30 second Air Flow fault
• Sector Test - This allows all valves to be forced closed and open
• Scan Test - This will perform a scan test
• Relay Test - (Refer to Screen 76).</td><td>ADM</td></tr>
<tr><td>76.</td><td>Relay Test - This allows testing each relay by turning it ON and OFF.</td><td>ADM</td></tr>
<tr><td>77.</td><td>Factory Defaults -
• Factory Defaults - To restore factory defaults, highlight Restore and press ↵.
• Defaults OK - Highlighting Start and pressing ↵ will acknowledge Factory Default settings and clear faults 12, 30, 31, 33, 34, 35, 38, 57, 68 and 72.</td><td>DST
ADM</td></tr>
</table>

<table>
<tr><th>Scrn No.</th><th>Description</th><th>Min. Access Level</th></tr>
<tr><td>78.</td><td>Communications - The Communications screen allows settings for:
• Net Delay - This function sets the maximum time for a message to travel around the network and return to the originating device. If the message does not return within the prescribed time, it is presumed lost and will be resent
• Pref. Port - This allows you to assigning a preferred port for communication
• Health Check - This function sets the frequency of health-check messages sent around the system
• Open-ended - In an open-ended VESDAnet loop select the port that is not connected to the VESDAnet loop.
<table>
<tr><th>Parameter</th><th>Default</th><th>Minimum</th><th>Maximum</th></tr>
<tr><td>Network delay</td><td>15 seconds</td><td>10 seconds</td><td>45 seconds</td></tr>
<tr><td>Preferred port</td><td>A</td><td>N/A</td><td>N/A</td></tr>
<tr><td>Health check</td><td>45 seconds</td><td>40 seconds</td><td>60 seconds</td></tr>
<tr><td>Open - ended</td><td>none</td><td>N/A</td><td>N/A</td></tr>
</table></td><td>DST</td></tr>
<tr><td>79.</td><td>Miscellaneous -
• UL Version - A ✔ against this indicates that the device is set to meet UL specifications.
• Latch Alarms - This provides a YES/NO option to latch/unlatch all Alarms
• Latch Faults - This provides a YES/NO option to latch/unlatch all Faults
• GP Input - The GP Input permits setting the general purpose input functions. For details on GPI functions please refer to the VESDA LaserSCANNER Detector Guide.
<table>
<tr><th>Parameter</th><th>Default</th></tr>
<tr><td>UL Version</td><td>Enabled</td></tr>
<tr><td>Latch Alarm</td><td>Enabled</td></tr>
<tr><td>Latch Fault</td><td>Enabled</td></tr>
</table></td><td>ADM

DST</td></tr>
<tr><td>80.</td><td>LaserCOMPACT Detector - Lists functions available for accessing and managing the properties of the selected VESDA LaserCOMPACT detector. Select the required option and press ↵.</td><td>USR</td></tr>
<tr><td>81.</td><td>Status - Displays the current Status of the Address
• Smoke Level - Displays the current smoke level in the VESDA Zone measured in obs%m or (ft)
• Alarms - If the VESDA Detector is in an alarm mode, the alarm stage is displayed
• Faults - List of faults generated for each VESDA Laser family device assigned to the Address
• Isolated - The Isolated status is reported only if the detector has been isolated
• Current% Flow - Reports the current percentage of air flow
• SW Version - Displays the software version in the detector
• Cfg Code - This is a configuration code set during production</td><td>USR</td></tr>
</table>

<table>
<tr><th>Scrn No.</th><th>Description</th><th>Min. Access Level</th></tr>
<tr><td>82.</td><td>Event Log -
• View Events
• Select Events</td><td>USR</td></tr>
<tr><td>83.</td><td>View Events - Lists a log of events</td><td>USR</td></tr>
<tr><td>84.</td><td>Select Events - This function assists in easier viewing of the logged events. The events can be sorted as per the categories displayed. After selecting the events, proceed to Screen 83 to view the events.
• End Date - This allows viewing of events up to the date mentioned in the date field. You can input the required date in the date field.
• End Time - This is the time up to which events will be displayed for viewing. You can input the required time in the time field.
• Events to view -
- Smoke Level - A ✔ against Smoke Levels will display logged smoke levels
- Alarms - To display a log of alarms place a ✔ against alarms
- Faults - Inserting a ✔ against Faults will list all the logged faults
- User Action - To view a log of user actions place a ✔ against User Action
- Clear Log - To clear the log of events highlight Start and press ↵.
Note: Use the + key to place a ✔ and - key to insert a X and deselect the option.
<table>
<tr><th>Parameter</th><th>Default</th><th>Minimum</th><th>Maximum</th></tr>
<tr><td>Select Events
end date
end time</td><td>
Selectable
Selectable</td><td>
Selectable
Selectable</td><td>
Selectable
Selectable</td></tr>
<tr><td>Events to View
Smoke Level
Alarms
Faults
User Action</td><td>
Enabled
Enabled
Enabled
Enabled</td><td>
N/A
N/A
N/A
N/A</td><td>
N/A
N/A
N/A
N/A</td></tr>
</table></td><td>ADM
DST</td></tr>
<tr><td>85.</td><td>Address Control - The four functions under Address Control are the same as the functions performed by the buttons on the VESDA Laser Display Module.
• Mode - This controls the mode of the LCD Numerical display on the VESDA Laser Display. Use the +, -, and the ↵ keys to change the mode
- Sensitivity - Displays the sensitivity level
- Smoke Level - Displays the current smoke level
- Address Number - Displays the assigned VESDA Zone number for the detector
• Silence - Silences beeping sound of the detector
• Reset - Resets faults
• Isolate - Starts and stops isolation of the detector</td><td>USR</td></tr>
<tr><td>86.</td><td>Smoke Thresholds -This screen lists sub-menus for:
• Smoke Thresholds
• Alarm Delays
• Smoke Change</td><td>USR</td></tr>
</table>

<table>
<tr><th>Scrn No.</th><th>Description</th><th>Min. Access Level</th></tr>
<tr><td>87.</td><td>Smoke Thresholds - This screen lists the available options for setting smoke thresholds.
• Fire
• Pre-Alarm
• Alert
• Overlay Alert
<table>
<tr><th>Parameter</th><th>Default</th><th>Minimum</th><th>Maximum</th></tr>
<tr><td rowspan="2">Fire 1/Fire</td><td>0.200% obs/m</td><td>0.015% obs/m</td><td>2.000% obs/m</td></tr>
<tr><td>(0.0625% obs/ft)</td><td>(0.0046% obs/ft)</td><td>(0.6250% obs/ft)</td></tr>
<tr><td rowspan="2">Action/Pre/ Alarm</td><td>0.140% obs/m</td><td>0.010% obs/m</td><td>1.995% obs/m</td></tr>
<tr><td>(0.044% obs/ft)</td><td>(0.0031 obs/ft)</td><td>(0.6234% obs/ft</td></tr>
<tr><td rowspan="2">Alert</td><td>0.080% obs/m</td><td>0.005% obs/m</td><td>1.990% obs/m</td></tr>
<tr><td>(0.025% obs/ft)</td><td>(0.0015% obs/ft)</td><td>(0.6218% obs/ft)</td></tr>
</table></td><td>ADM</td></tr>
<tr><td>88.</td><td>Alarm Delays - In this screen insert the required time delay (in seconds) before an alarm is generated at Fire, Pre-Alarm, Alert, Overlay Alert levels. This screen also offers the option of simultaneous or cumulative delay times before the alarm is generated. The instant fire alarm option can be enabled or disabled in this screen.
<table>
<tr><th>Parameter</th><th>Default</th><th>Minimum</th><th>Maximum</th></tr>
<tr><td>Fire 1/Fire</td><td>10 seconds</td><td>0 seconds</td><td>60 seconds</td></tr>
<tr><td>Action/Pre/Alarm</td><td>10 seconds</td><td>0 seconds</td><td>60 seconds</td></tr>
<tr><td>Alert</td><td>10 seconds</td><td>0 seconds</td><td>60 seconds</td></tr>
<tr><td>Delay Times</td><td>Simultaneous</td><td>Simultaneous</td><td>Cumulative</td></tr>
<tr><td>Instantaneous Fire</td><td>Disabled</td><td>Enabled</td><td>Disabled</td></tr>
</table></td><td>ADM</td></tr>
<tr><td>89.</td><td>Smoke Change - The change in obscuration rate mentioned here will register the event in the event log. This is subject to the change occurring over the interval period that is input. You can input the required obscuration and interval.
• Change By
• Min. Interval
<table>
<tr><th>Parameter</th><th>Default</th><th>Minimum</th><th>Maximum</th></tr>
<tr><td rowspan="2">Change By</td><td>0.02% obs/m</td><td>0.005% obs/m</td><td>0.2% obs/m</td></tr>
<tr><td>(0.0062% obs/ft)</td><td>(0.0015% obs/ft)</td><td>(0.0625% obs/ft)</td></tr>
<tr><td>Min. Interval</td><td>2 seconds</td><td>2 seconds</td><td>10 seconds</td></tr>
</table></td><td>ADM
DST</td></tr>
</table>

<table>
<tr><th>Scrn No.</th><th>Description</th><th>Min. Access Level</th></tr>
<tr><td>90.</td><td>AutoLearn - The AutoLearn function allows setting the thresholds automatically. The detector measures the ambient over the set period and will establish the smoke thresholds accordingly. Enter the number of days, hours and minutes over which the AutoLearn function is to run.
<table>
<tr><th>Parameter</th><th>Default</th><th>Minimum</th><th>Maximum</th></tr>
<tr><td rowspan="3">AutoLearn</td><td>14 days</td><td>0 days</td><td>15 days</td></tr>
<tr><td>0 hours</td><td>0 hours</td><td>23 hours</td></tr>
<tr><td>0 minutes</td><td>15 minutes</td><td>59 minutes</td></tr>
</table></td><td>ADM</td></tr>
<tr><td>91.</td><td>Address Number - Assign the VESDA Zone number to the detector.</td><td>ADM</td></tr>
<tr><td>92.</td><td>Address Name/Location - Allocate a VESDA Zone name and location and assign these to the respective detector.</td><td>ADM</td></tr>
<tr><td>93.</td><td>Air Flow - This screen lists the options available to monitor and manage air flows. It displays options for 2 sub-menus:
• Flow Thresholds
• Normalize</td><td>ADM</td></tr>
<tr><td>94.</td><td>Flow Thresholds - Input the required High Urgent, High Minor, Low Minor and Low Urgent air flow thresholds. Enter the time over which the air flow should be monitored above and below the threshold levels. An appropriate urgent or minor air flow fault will be generated once the air flow crosses the threshold and remains above or below the threshold for the period set as “Delay”.
<table>
<tr><th>Parameter</th><th>Default</th><th>Minimum</th><th>Maximum</th></tr>
<tr><td>High Urgent</td><td>130%</td><td>105%</td><td>200%</td></tr>
<tr><td>High Minor</td><td>120%</td><td>105%</td><td>200%</td></tr>
<tr><td>Low Minor</td><td>80%</td><td>25%</td><td>95%</td></tr>
<tr><td>Low Urgent</td><td>70%</td><td>25%</td><td>95%</td></tr>
<tr><td>Delay</td><td>0 seconds</td><td>0 seconds</td><td>60 seconds</td></tr>
</table></td><td>ADM</td></tr>
<tr><td>95.</td><td>Normalize - The Normalize screen displays the current air flow rates and the current raw flow for each pipe. To normalize the air flow highlight Start and pressing ↵.
Note: Normalizing air flow takes approximately 11 minutes.</td><td>ADM</td></tr>
</table>

<table>
<tr><th>Scrn No.</th><th>Description</th><th>Min. Access Level</th></tr>
<tr><td>96.</td><td>Filter - Displays details on the life and usage of the filter. When the filter is replaced with a new filter, highlight Start and press ↵ to restart the dust count and due date for replacement. The service interval for filter replacements can be entered to suit the ambient conditions of the VESDA Zone in which the detector is installed.
• Life Used
• Date Due
• Service Interval
• New Filter
• Dust Count
• Dust Limit
Default: 1825 days (5 years), Min. 1 day, Max 3655 days (10 years)</td><td>ADM
DST
DST</td></tr>
<tr><td>97.</td><td>Reference Detector - If a reference detector is connected to VESDAnet, enter the:
• Reference Address Number
• Dilution Factor - This is the amount of offset required from the reference detector. Setting it to 100% will cause the detector to ignore the same amount of smoke as is being detected by the reference detector. Setting it to 50% ignores half of the smoke detected at the reference detector. These settings allow you to fine tune how much of the smoke detected by the reference detector is also likely to reach each detector.
• Delay - The amount of time it will take smoke to move from the reference detector to the other detectors.
<table>
<tr><th>Parameter</th><th>Default</th><th>Minimum</th><th>Maximum</th></tr>
<tr><td>Reference Address No</td><td>255</td><td>Selectable</td><td>Selectable</td></tr>
<tr><td>Dilution</td><td>100%</td><td>1%</td><td>100%</td></tr>
<tr><td>Delay</td><td>2 minutes</td><td>0 minutes</td><td>15 minutes</td></tr>
</table></td><td>ADM</td></tr>
<tr><td>98.</td><td>Rebuild Address List - Highlight start and press ↵ to rebuild the Address List. Use this option to rebuild the Address List after removing a display module assigned to the detector.</td><td>ADM</td></tr>
<tr><td>99.</td><td>Power Supply Number - Input the number of the power supply that is assigned to the detector. If the Intelligent Power Supply is not being used enter “0”.</td><td>ADM</td></tr>
<tr><td>100.</td><td>Button Lockout - This screen provides the option to Lock or enable the Reset/ Isolate Button on the VESDA LaserCOMPACT.</td><td>ADM</td></tr>
<tr><td>101.</td><td>Diagnostics - It is possible to conduct alarm and fault tests through sub-menus of this screen.
• Alarm Test - This causes the detector to generate a Fire condition
• Fault Test - This causes a system fault for 30 seconds
• Flow Fault - Turns the aspirator off for 30 seconds causing an air flow fault. (This causes the LED's to light up)
• Lamp Test - This causes the LCDs to light up
• Relay Test - (refer to Screen 102).</td><td>ADM</td></tr>
<tr><td>102.</td><td>Relay Test - This allows testing each relay by turning it ON and OFF.</td><td>ADM</td></tr>
</table>

<table>
<tr><th>Scrn No.</th><th>Description</th><th>Min. Access Level</th></tr>
<tr><td>103.</td><td>Factory Defaults -
• Factory Defaults - To restore factory defaults, highlight Restore and press ↵.
• Defaults OK - Highlighting Start and pressing ↵ will acknowledge Factory Default settings and clear faults 12, 30, 31, 33, 34, 35, 38, 57, 68 and 72.</td><td>DST
ADM</td></tr>
<tr><td>104.</td><td>Communications - The Communications screen allows settings for:
• Net Delay - This function sets the maximum time for a message to travel around the network and return to the originating device. If the message does not return within the prescribed time, it is presumed lost and will be resent
• Prof. Port - This allows you to assign a preferred port for communication
• Health Check - This function sets the frequency of health-check messages sent around the system
• Open-ended - In an open-ended VESDAnet loop select the port that is not connected to the VESDAnet loop.
<table>
<tr><th>Parameter</th><th>Default</th><th>Minimum</th><th>Maximum</th></tr>
<tr><td>Network delay</td><td>15 seconds</td><td>10 seconds</td><td>45 seconds</td></tr>
<tr><td>Preferred port</td><td>A</td><td>N/A</td><td>N/A</td></tr>
<tr><td>Health check</td><td>45 seconds</td><td>40 seconds</td><td>60 seconds</td></tr>
<tr><td>Open - ended</td><td>none</td><td>N/A</td><td>N/A</td></tr>
</table></td><td>DST</td></tr>
<tr><td>105.</td><td>Miscellaneous -
• UL Version - A ✔ against this indicates that the device is set to meet UL specifications.
• Latch Alarms - This provides a YES/NO option to latch/unlatch all Alarms
• Latch Faults - This provides a YES/NO option to latch/unlatch all Faults
• GP Input - The GP Input permits setting the general purpose input functions. For details on GPI functions please refer to the VESDA LaserPLUS Detector Guide.
<table>
<tr><th>Parameter</th><th>Default</th></tr>
<tr><td>UL Version</td><td>Enabled</td></tr>
<tr><td>Latch Alarm</td><td>Enabled</td></tr>
<tr><td>Latch Fault</td><td>Enabled</td></tr>
</table></td><td>ADM
DST</td></tr>
<tr><td>106.</td><td>Ancillary Devices - Should be put under the same flow line as detectors. Select the device by highlighting it and press ↵.</td><td>USR</td></tr>
<tr><td>107.</td><td>Display/Relays - Should be put under the same flow line as detectors. Select the Display/Relay and press ↵.</td><td>USR</td></tr>
<tr><td>108.</td><td>Status - Displays the current status of the Display/Relay
• Faults - List of faults generated for Display/Relay connected to VESDAnet
• SW Version - Displays the software version of the Display/Relay
• Cfg Code - This is a configuration code set during production</td><td>USR</td></tr>
</table>

<table>
<tr><th>Scrn No.</th><th>Description</th><th>Min. Access Level</th></tr>
<tr><td>109.</td><td>Address Control - The four functions under Address Control are the same as the functions performed by the buttons on the VESDA Laser Display Module.
• Mode - This controls the mode of the LCD Numerical display on the VESDA Laser Display. Use the +, -, and the ↵ key to change the mode
- Current Sector - Display the First Alarm Sector in LaserSCANNER Display
- Sensitivity - Displays the sensitivity level
- Smoke Level - Displays the current smoke level
- Address Number - Displays the assigned VESDA Zone number for the detector
• Silence - Silences beeping sound of the detector
• Scan - Selecting this option in a LaserSCANNER Display commences a Scan sequence of the assigned LaserSCANNER Detector
• Reset - Resets faults
• Isolate - Starts and stops isolation of the detector</td><td>USR</td></tr>
<tr><td>110.</td><td>Address Number - Assign the VESDA Zone number to a Laser Display/Relay.</td><td>ADM</td></tr>
<tr><td>111.</td><td>Location - Allocate a VESDA Zone name and location and assign these to the respective Laser Display/Relay.</td><td>ADM</td></tr>
<tr><td>112.</td><td>Power Supply Number - Input the number of the power supply that is assigned to the detector. If the VESDA Intelligent Power Supply is not being used enter “0”.</td><td>ADM</td></tr>
<tr><td>113.</td><td>Button Lockout - This screen provides the option to Lock or enable the buttons on a VESDA Laser Display.</td><td>ADM</td></tr>
<tr><td>114.</td><td>Relays/Disp Connected - Use the screen to enter the number of relays connected to the Display. It also indicates if the detector is a LaserSCANNER.</td><td>DST</td></tr>
<tr><td>115.</td><td>Relay Setup - This displays sub-menus for:
• Relay Startup Mode (only used on a display with relays assigned)
• Latching
• Beeper
• Relay Assignments (only used on a display with relays assigned)</td><td>ADM</td></tr>
<tr><td>116.</td><td>Relay Startup Mode - Displays the energize/de-energized condition for each relay. If required, use the + - and ↵ keys to change the energized/de-energized state of relays.
<table>
<tr><th>Parameter</th><th>Default</th></tr>
<tr><td>Relay Startup Mode</td><td></td></tr>
<tr><td>Relay 2 & 3 energized</td><td>Energized</td></tr>
<tr><td>Relays 1, 4-7 (4-12)</td><td>De-Energized</td></tr>
</table></td><td>ADM</td></tr>
</table>

<table>
<tr><th>Scrn No.</th><th>Description</th><th>Min. Access Level</th></tr>
<tr><td>117.</td><td>Latching - This screen displays the latched/unlatched relay condition for different levels of alarms in each sector, faults and scanning. In the latched condition the reporting of an alarm or a fault continues to be reported even after the event is over. Manual intervention is necessary to reset. If the condition is unlatched the reporting of the condition automatically stops once the event is over. To latch an alarm or a fault place a ✔ against the respective alarm level or fault. The isolate function is fixed for unlatched and cannot be changed.
<table>
<tr><th>Parameter</th><th>Default</th></tr>
<tr><td>Sector (1-4)</td><td>N/A</td></tr>
<tr><td>Fire 2</td><td>Latched</td></tr>
<tr><td>Fire 1</td><td>Latched</td></tr>
<tr><td>Alert</td><td>Latched</td></tr>
<tr><td>Scanning</td><td>N/A</td></tr>
<tr><td>Urgent Fault</td><td>Latched</td></tr>
<tr><td>Minor Fault</td><td>Latched</td></tr>
<tr><td>Isolate</td><td>Unlatched</td></tr>
</table></td><td>ADM</td></tr>
<tr><td>118.</td><td>Beeper - Placing a tick beside each of the fire and fault conditions will result in the beeper activating during this condition. If the display is allocated to a LaserSCANNER, fire conditions for individual sectors can also be chosen for beep on or off. To set a condition to beep place a ✔ against the respective condition.
<table>
<tr><th>Parameter</th><th>Default</th></tr>
<tr><td>Sector (1-4)</td><td>Latched</td></tr>
<tr><td>Fire 2</td><td>Latched</td></tr>
<tr><td>Fire 1 Action</td><td>Latched</td></tr>
<tr><td>Alert</td><td>Latched</td></tr>
<tr><td>Scanning</td><td>Latched</td></tr>
<tr><td>Urgent Fault</td><td>Latched</td></tr>
<tr><td>Minor Fault</td><td>Latched</td></tr>
<tr><td>Isolate</td><td>Latched</td></tr>
</table></td><td>ADM</td></tr>
</table>

<table>
<tr><th>Scrn No.</th><th>Description</th><th>Min. Access Level</th></tr>
<tr><td>119.</td><td>Relay Assignments - Each relay is allocated a screen. In their respective screens assign the relevant alarm, fault, scanning or isolate function. Multiple functions can be assigned to each relay. Relay 3 and relay 6 are permanently assigned to Urgent Fault and Fire 1 functions respectively. Additional functions may be assigned to Relays 3 and 6. Use the ↵ key to assign or de-assign functions.
<table>
<tr><th>Parameter</th><th>Default</th></tr>
<tr><td>Scanning</td><td>Relay 12</td></tr>
<tr><td>Sector 4</td><td>Relay 11</td></tr>
<tr><td>Sector 3</td><td>Relay 10</td></tr>
<tr><td>Sector 2</td><td>Relay 9</td></tr>
<tr><td>Sector 1</td><td>Relay 8</td></tr>
<tr><td>Fire 2</td><td>Relay 7</td></tr>
<tr><td>Fire 1</td><td>Relay 6</td></tr>
<tr><td>Action</td><td>Relay 5</td></tr>
<tr><td>Alert</td><td>Relay 4</td></tr>
<tr><td>Urgent Fault</td><td>Relay 3</td></tr>
<tr><td>Minor Fault</td><td>Relay 2</td></tr>
<tr><td>Isolate</td><td>Relay 1</td></tr>
</table></td><td>ADM</td></tr>
<tr><td>120.</td><td>Factory Defaults -
• Factory Defaults - To restore factory defaults, highlight Restore and press ↵.
• Defaults OK - Highlighting Start and pressing ↵ will acknowledge Factory Default settings and clear faults 12, 30, 31, 33, 34, 35, 38, 57, 68 and 72.</td><td>DST

ADM</td></tr>
<tr><td>121.</td><td>Communications - The Communications screen allows settings for:
• Net Delay - This function sets the maximum time for a message to travel around the network and return to the originating device. If the message does not return within the prescribed time, it is presumed lost and will be resent
• Pref. Port - This allows you to assign a preferred port for communication
• Health Check - This function sets the frequency of health-check messages sent around the system
• Open-ended - In an open ended VESDAnet loop select the port that is not connected to the VESDAnet loop.
<table>
<tr><th>Parameter</th><th>Default</th><th>Minimum</th><th>Maximum</th></tr>
<tr><td>Network delay</td><td>15 seconds</td><td>10 seconds</td><td>45 seconds</td></tr>
<tr><td>Preferred port</td><td>A</td><td>N/A</td><td>N/A</td></tr>
<tr><td>Health check</td><td>45 seconds</td><td>40 seconds</td><td>60 seconds</td></tr>
<tr><td>Open - ended</td><td>none</td><td>N/A</td><td>N/A</td></tr>
</table></td><td>DST</td></tr>
</table>

<table>
<tr><th>Scrn No.</th><th>Description</th><th>Min. Access Level</th></tr>
<tr><td>122.</td><td>Miscellaneous -
• Isolate remind - Provides an option to enable or disable the Beeper reminder for Isolate function
• Latch Alarms - This provides a YES/NO option to latch/unlatch all Alarms
• Latch Faults - This provides a YES/NO option to latch/unlatch all Faults
<table><tr><th>Parameter</th><th>Default</th></tr><tr><td>Isolate Remind</td><td>Enabled</td></tr><tr><td>Latch Alarm</td><td>Enabled</td></tr><tr><td>Latch Fault</td><td>Enabled</td></tr></table></td><td>ADM</td></tr>
<tr><td>123.</td><td>LCD Programmer - Select the LCD Programmer and press ↵.</td><td>USR</td></tr>
<tr><td>124.</td><td>Status - Displays the current status for:
• Current User Level
• Current Access Level
• Faults
• Software Version Installed
• Configuration Code</td><td>USR</td></tr>
<tr><td>125.</td><td>Address (Zone) Number - If the LCD Programmer has been allocated a Address (Zone) Number, it is displayed in this screen. This is only for VLS.</td><td>ADM</td></tr>
<tr><td>126.</td><td>Location - Allocate a VESDA Zone name and location and assign these to the LCD Programmer.</td><td>ADM</td></tr>
<tr><td>127.</td><td>Power Supply Number - Input the number of the power supply that is assigned to the detector. If the VESDA Intelligent power supply is not being used enter “0”.</td><td>ADM</td></tr>
<tr><td>128.</td><td>Address Control Lockout - This screen allows you to lock or unlock the button functions on any Laser Display in the VESDA Zone. This stops someone logging on at an OPERATOR level from using the zone control or system control function. The buttons controlled are:
• Mode/Test
• Silence/Scan
• Reset
• Isolate</td><td>ADM</td></tr>
<tr><td>129.</td><td>Factory Defaults -
• Factory Defaults - To restore factory defaults, highlight Restore and press ↵.
• Defaults OK - Highlighting Start and pressing ↵ will acknowledge Factory Default settings and clear faults 12, 30, 31, 33, 34, 35, 38, 57, 68 and 72.</td><td>DST
ADM</td></tr>
</table>

Scrn No.	Description	Min. Access Level
130.	**Communications** - The Communications screen allows settings for: • Net Delay - This function sets the maximum time for a message to travel around the network and return to the originating device. If the message does not return within the prescribed time, it is presumed lost and will be resent • Pref. Port - This allows you to assign a preferred port for communication • Health Check - This function sets the frequency of health-check messages sent around the system • Open-ended - In an open ended VESDAnet loop select the port that is not connected to the VESDAnet loop.	DST
131.	**Miscellaneous** - • UL Version - A ✔ against this indicates that the device is set to meet UL specifications. • Def. User - Sets the chosen user as default (the first to appear when logging on) • Support - Displays the contact phone number for support • Latch Alarms - This provides a YES/NO option to latch/unlatch all Alarms • Latch Faults - This provides a YES/NO option to latch/unlatch all Faults	ADM ADM DST ADM ADM
132.	**HLI** - Select the HLI and press ↵.	USR
133.	**Status** - Displays the current status for: • Faults - Lists faults for the HLI • SW Version - Displays the software version of the HLI • Cfg Code - This is a configuration code set during production • Sub-Node Type - Informs the type of HLI connected to VESDAnet	USR
134.	**Location** - Allocate a VESDA Zone name and location and assign these to the LCD Programmer.	ADM
135.	**Power Supply Number** - Input the number of the power supply that is assigned to the detector. If the VESDA Intelligent Power Supply is not being used enter “0”.	ADM
136.	**Factory Defaults** - • Factory Defaults - To restore factory defaults, highlight Restore and press ↵. • Defaults OK - Highlighting Start and pressing ↵ will acknowledge Factory Default settings and clear faults 12, 30, 31, 33, 34, 35, 38, 57, 68 and 72.	DST ADM
137.	**Communications** - The Communications screen allows settings for: • Net Delay - This function sets the maximum time for a message to travel around the network and return to the originating device. If the message does not return within the prescribed time, it is presumed lost and will be resent • Pref. Port - This allows you to assign a preferred port for communication • Health Check - This function sets the frequency of health-check messages sent around the system • Open-ended - In an open ended VESDAnet loop select the port that is not connected to the VESDAnet loop.	DST
138.	**Setup By Type** - The Setup By Type selection allows accessing and managing the properties of all VESDA Laser family devices connected to VESDAnet. This screen lists all the VESDA Laser family products connected to the VESDAnet. Highlight the VESDA Laser product and press ↵.	USR

<table>
<tr><th>Scrn No.</th><th>Description</th><th>Min. Access Level</th></tr>
<tr><td>139.</td><td>VESDA Device - This screen lists all devices of a particular VESDA Laser product (e.g. Each VESDA LaserPLUS detector connected to VESDAnet will be displayed with their respective unique detector number under the VLP/VLS screen). To access the device through the LCD Programmer, highlight the device and press ↵.

Note: For details of menu descriptions refer from “Screen Number 6, on page 12” to “Screen Number 137, on page 38.”</td><td>USR</td></tr>
<tr><td>140.</td><td>System/All Devices - This alternative permits setting up and managing the parameters of the entire system connected to VESDAnet.</td><td>USR</td></tr>
<tr><td>141.</td><td>Status - This screen presents the current status for all the devices connected to VESDAnet. It displays the smoke level from the detector with the highest reading. The current status of Alarms and Faults for each device is listed under their respective device names.</td><td>USR</td></tr>
<tr><td>142.</td><td>System Control - The four functions under System Control are the same as the functions performed by the buttons on the VESDA Laser Display Module.

• Mode - This controls the mode of the LCD Numerical display on the VESDA Laser Display. Use the +, -, and the ↵ key to change the mode
- Current Sector - Display the First Alarm Sector in LaserSCANNER Display
- Sensitivity - Displays the sensitivity level
- Smoke Level - Displays the current smoke level
- Address Number - Displays the assigned VESDA Zone number for the detector
• Silence - Silences beeping sound of the detector
• Scan - Selecting this option in a LaserSCANNER Display commences a Scan sequence of the assigned LaserSCANNER Detector
• Reset - Resets faults
• Isolate - Starts and stops isolation of the detector</td><td>USR</td></tr>
<tr><td>143.</td><td>AutoLearn - The AutoLearn function allows setting the thresholds automatically. The detector measures the ambient over the set period and will establish the smoke and alarm thresholds accordingly. Enter the number of days, hours and minutes over which the AutoLearn function is to apply.
<table>
<tr><th>Parameter</th><th>Default</th><th>Minimum</th><th>Maximum</th></tr>
<tr><td rowspan="3">AutoLearn</td><td>14 days</td><td>0 days</td><td>15 days</td></tr>
<tr><td>0 hours</td><td>0 hours</td><td>23 hours</td></tr>
<tr><td>0 minutes</td><td>15 minutes</td><td>59 minutes</td></tr>
</table></td><td>ADM</td></tr>
<tr><td>144.</td><td>Set Date & Time - This screen permits setting the date, time and day.</td><td>USR</td></tr>
<tr><td>145.</td><td>Weekend - Placing a ✔ against the relevant week day will denote it as being weekend. By default Saturday and Sunday are set as weekend days.</td><td>ADM</td></tr>
<tr><td>146.</td><td>Holidays - Insert the first and the last day of holidays to set different smoke thresholds during this period.</td><td>ADM</td></tr>
</table>

<table>
<tr><th>Scrn No.</th><th>Description</th><th>Min. Access Level</th></tr>
<tr><td>147.</td><td>Users - This screen presents sub menus to display and manage user information:
Change User Details
Add User
Delete User</td><td>USR</td></tr>
<tr><td>148.</td><td>Change User Details - This screen displays the current user ID and PIN. The User ID and PIN can be changed in this screen. The Access level cannot be changed. User details can be changed for the level at which the current User is logged on.</td><td>USR/ ADM/ DST</td></tr>
<tr><td>149.</td><td>Add User - This screen permits adding users at the Operator and Administrator levels. Enter the User ID and PIN of the new user. Permits deleting a User at an access level below which the current user is logged on.</td><td>ADM/ DST</td></tr>
<tr><td>150.</td><td>Delete User - Authorization for a user at the Operator or the Administrator level can be deleted in this screen. Permits deleting a User at an access level below which the current user is logged on.</td><td>ADM/ DST</td></tr>
<tr><td>151.</td><td>Air Flow - Input the required High Urgent, High Minor, Low Minor and Low Urgent air flow thresholds. Enter the time over which the air flow should be monitored above and below the threshold levels. An appropriate urgent or minor air flow fault will be generated once the air flow crosses the threshold and remains above or below the threshold for the period set as “Delay”.
<table>
<tr><th>Parameter</th><th>Default</th><th>Minimum</th><th>Maximum</th></tr>
<tr><td>High Urgent</td><td>130%</td><td>105%</td><td>200%</td></tr>
<tr><td>High Minor</td><td>120%</td><td>105%</td><td>200%</td></tr>
<tr><td>Low Minor</td><td>80%</td><td>25%</td><td>95%</td></tr>
<tr><td>Low Urgent</td><td>70%</td><td>25%</td><td>95%</td></tr>
<tr><td>Delay</td><td>0 seconds</td><td>0 seconds</td><td>60 seconds</td></tr>
</table></td><td>ADM</td></tr>
<tr><td>152.</td><td>Filter - Set the service interval for changing the filter in this screen.</td><td>ADM</td></tr>
<tr><td>153.</td><td>Reference Detector - If a reference detector is connected to VESDAnet, enter the:
Reference Address Number
Dilution Factor - This is the factor by which the background levels have to reduce to reach the levels of the current VESDA Zone
Delay - This is the time taken for the current VESDA Zone to return to its ambient levels after background from the Reference Address is introduced.
<table>
<tr><th>Parameter</th><th>Default</th><th>Minimum</th><th>Maximum</th></tr>
<tr><td>Reference Address No</td><td>255</td><td>Selectable</td><td>Selectable</td></tr>
<tr><td>Dilution</td><td>100%</td><td>1%</td><td>100%</td></tr>
<tr><td>Delay</td><td>2 minutes</td><td>0 minutes</td><td>15 minutes</td></tr>
</table></td><td>ADM</td></tr>
<tr><td>154.</td><td>Button Lockout - This screen provides the option to Lock or enable the buttons on all VESDA Laser Display connected to VESDAnet.</td><td>ADM</td></tr>
</table>

<table>
<tr><th>Scrn No.</th><th>Description</th><th>Min. Access Level</th></tr>
<tr><td>155.</td><td>Communications - The Communications screen allows settings for:
• Net Delay - This function sets the maximum time for a message to travel around the network and return to the originating device. If the message does not return within the prescribed time, it is presumed lost and will be resent
• Pref. Port - This allows you to assign a preferred port for communication
• Health Check - This function sets the frequency of health-check messages sent around the system.
<table>
<tr><th>Parameter</th><th>Default</th><th>Minimum</th><th>Maximum</th></tr>
<tr><td>Network delay</td><td>15 seconds</td><td>10 seconds</td><td>45 seconds</td></tr>
<tr><td>Preferred port</td><td>A</td><td>N/A</td><td>N/A</td></tr>
<tr><td>Health check</td><td>45 seconds</td><td>40 seconds</td><td>60 seconds</td></tr>
<tr><td>Open - ended</td><td>none</td><td>N/A</td><td>N/A</td></tr>
</table></td><td>DST</td></tr>
<tr><td>156.</td><td>Smoke Change - This screen sets the minimum interval over which a change in the obscuration rate should occur before an alarm is triggered, or the event is registered in the Event Log. You can enter the required interval.
<table>
<tr><th>Parameter</th><th>Default</th><th>Minimum</th><th>Maximum</th></tr>
<tr><td>Min. Interval</td><td>2 seconds</td><td>2 seconds</td><td>10 seconds</td></tr>
</table></td><td>DST</td></tr>
<tr><td>157.</td><td>Miscellaneous -
• Units - This gives the user an option to enter and display data in S.I. (International System of Units), or U.S. (Us Imperial measurements)
• UL Version - A ✔ against this indicates that the Devices on the system are set to meet UL specifications.
• Isolate Remind - Provides an option to enable or disable the reminder beeper when the Isolate function is enabled
• Support - Displays the contact phone number for support
• Device ID - This provides an option to Name and Number, Name Only or Number Only devices connected to VESDAnet.
• Refresh Map - Refreshes the VESDAnet map when a Detector Chassis is changed
• Latch Alarms - This provides a YES/NO option to latch/unlatch all Alarms
• Latch Faults - This provides a YES/NO option to latch/unlatch all Faults</td><td>ADM
ADM
ADM
DST
ADM
ADM
ADM
ADM</td></tr>
<tr><td>158.</td><td>Show Wiring Order - Lists all the VESDA Laser family devices connected to VESDAnet.</td><td>USR</td></tr>
<tr><td>159.</td><td>LCD Screen - Select this menu to set LCD screen options.</td><td>USR</td></tr>
<tr><td>160.</td><td>Screen Control -
• Contrast - Permits the LCD Screen Contrast setting between 0 and 10
• Backlight - Controls the backlight ON and OFF function</td><td>USR</td></tr>
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