



LDAR Solutions, Inc.

User's Guide: WDA-2000



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Introduction

US Patent Number 7,369,945

The WDA-2000 was awarded US Patent number 7.369,945 on May 6, 2008. Under the title “Apparatus and Method for Storing and Transporting Data Related to Vapor Emissions and Measurements Thereof”, the WDA-2000 has the ability to collect, transmit and store fugitive gas emission data while connected to a monitoring device, such as the TVA-1000B, manufactured by Thermo/Fisher Scientific. For more information concerning the patent, please visit the US Patent and Trademark website at <http://patft1.uspto.gov/>.

FM Approval Certificate of Compliance



The WDA-2000 is a Factory Mutual Approved device (#3025425) certified by the FM Global group since August 4, 2006. It is approved to be intrinsically safe for Class I, Division 1 and Groups A, B, C, and D. The WDA-2000 is specifically approved for use with Thermo Fisher Scientific's TVA-1000B Portable Toxic Vapor Analyzer in accordance with Control Drawing No. 294-0040.



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CERTIFICATE OF COMPLIANCE

HAZARDOUS (CLASSIFIED) LOCATION ELECTRICAL EQUIPMENT

This certificate is issued for the following equipment:

WDA-1000 Wireless Data-Log Adapter.
WDA-2000 Wireless Data-Log Adapter.
IS II 1, 1.1 A&C/D 14 Ta=40°C
Special Conditions of Use:
1. For use with Thermo Electron Corporation's TVA-1000 Portable Toxic Vapor Analyzer in accordance with Control Drawing No. 294-0040.

Equipment Ratings:

Intrinsically Safe for Class I, Division 1, Groups A, B, C, and D; indoor Hazardous (Classified) Locations when used with the FM Approved Thermo Electron Corporation's TVA-1000 Portable Toxic Vapor Analyzer in accordance with Control Drawing No. 294-0040.

FM Approved for:

LDAR Solutions, LP
Baytown, TX 77522-312
USA

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3026405
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This certifies that the equipment described has been found to comply with the following Approval Standards and other documents:

Class 3500	1998
Class 3810	1999
Class 3810	2005

Original Project ID: 3025425 Approval Granted: August 4, 2006

Subsequent Revision Reports / Date Approval Amended			
Report Number	Date	Report Number	Date
090319	May 21, 2009		

FM Approvals LLC

J. E. Marquardt
J. E. Marquardt
Group Manager, Electrical

29 May 2009
Date

Connecting the WDA-2000 to the TVA-1000B

With the TVA-1000B powered off, connect the WDA-2000 cable to the electrical jack on top of the unit next to the sample line port. Place the WDA-2000 on the side of the TVA-1000B with hook and loop or 3M Dual Lock® reclosable fastener. This will secure the WDA-2000 in place and prevent damage to the cable. (refer to Figure 1.1 and 1.2)

Note:

- Always make sure the TVA-1000B is turned off before connecting or disconnecting the WDA-2000.
- The connector is a push-pull style. Do not turn the connector in an attempt to establish the connection or disconnect the WDA-2000.

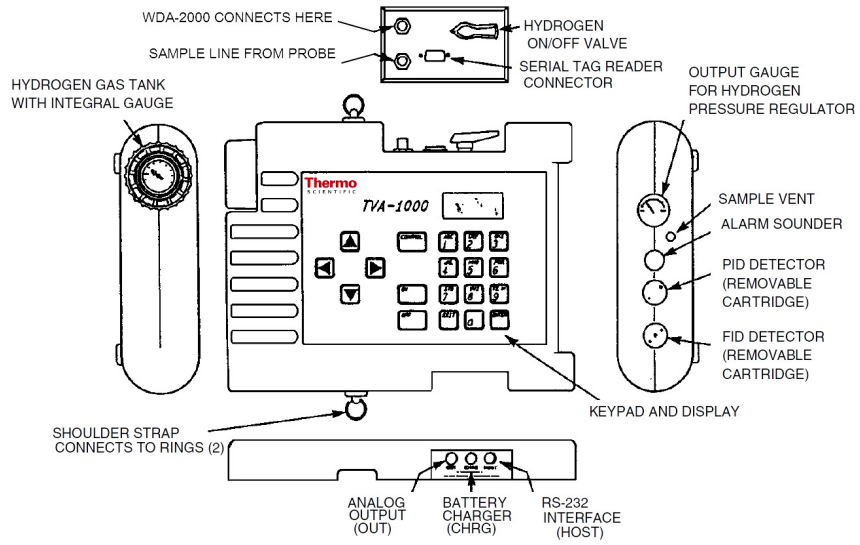


Figure 1.1 TVA-1000B diagram

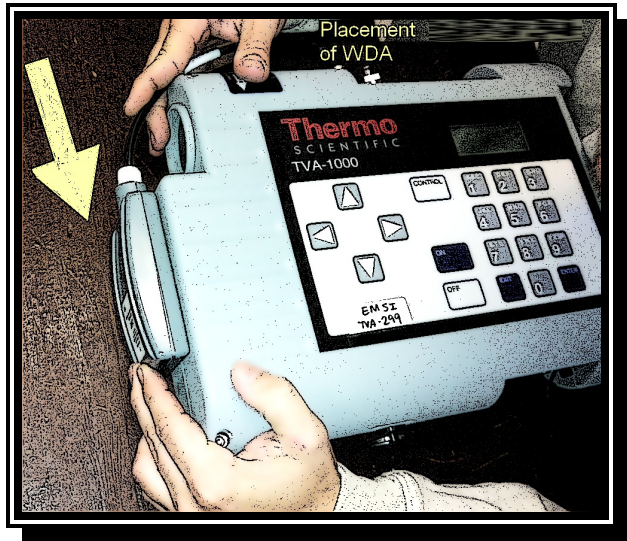


Figure 1.2 Placement of the WDA-2000

WDA Status Indicator

Bluetooth Signal Range: 100m (300 feet)



WDA Status Indicator

Turn on the TVA-1000B and check that the indicator light on the front bottom portion of the WDA-2000 case comes on.

If the indicator light on the WDA-2000 is blinking orange, the WDA is ready to connect to a Bluetooth compatible handheld or mobile computer with the appropriate software.

WDA Status	Definition.
Blinking Orange	WDA-2000 is ready
Blinking Green	WDA-2000 is connected via Bluetooth
Blinking Red	Restart the TVA-1000B
Solid Red	Send in For Repair

Setting the Probe Display Mode

The TVA-1000B needs to be in the same probe display mode as the LDAR software you're using.

Setting the Thermo TVA-1000B probe display mode.

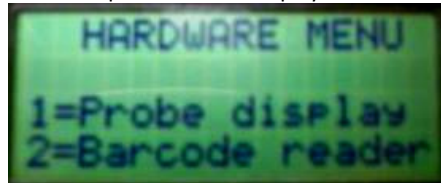
1. Turn on your TVA-1000B and go into the Main Menu.
2. Select option 2=Setup to enter the Setup Menu.



3. Select option 5=Hdware to enter the Hardware Menu.



4. Select option 1=Probe display to enter the Probe Display Menu.



5. Once in the Probe Display menu, select the appropriate probe display based on the following table.



Probe display mode availability based on WDA type

WDA-1000	WDA-2000 FW 2.6.1	WDA-2000 FW 2.6.3
Basic Mode Only	Basic Mode Only	Basic or Enhanced Mode

WDA-2000 Technical Specifications

Specifications
FM Class 1, Division 1, Groups A, B, C, D certified
FCC Part 15 - Class A and B
Fully compatible with TVA 1000 analyzers (A and B versions)
Power supplied by host unit 4.4 - 5.5v
Works with TVA in PID and FID modes
128MB of internal RAM
8 strand ALPHA WIRE cable
Class 1 Bluetooth, 100m (300 feet) range
Total weight including cable: 5.6 ounces

Note concerning the WDA Firmware: Alteration of the WDA-2000 or its firmware by the user voids the FM intrinsically safe certification and warranty of this unit.

Ignite and Re-ignite Function

If flameout occurs your TVA can be reignited without having to unpack it.

With compatible software the WDA-2000 is capable of handling the reignite command.

If you're interested in a standalone reignite application for your handheld or mobile computer email us at info@ldarsolutions.com

More Support Information

For specific instructions on connecting and setting up your handheld or mobile computer Bluetooth settings go to:

<http://ldarsolutions.com/index.php/support>