User Guide
00809-0300-4975, Rev AA
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WinHost Configuration and Diagnostic Software

For Rosemount™ 975 Flame Detectors

ROSEMOUNT™

EMERSON™

Legal notice

⚠ WARNING

All individuals who have or will have responsibility for using, maintaining, or servicing this product must read this document carefully.

⚠ WARNING

Physical access

Unauthorized personnel may potentially cause significant damage to and/or misconfiguration of end users' equipment. This could be intentional or unintentional and needs to be protected against.

Physical security is an important part of any security program and fundamental to protecting your system. Restrict physical access by unauthorized personnel to protect end users' assets. This is true for all systems used within the facility.

⚠ CAUTION

Equipment damage

This device is not field repairable due to the meticulous alignment and calibration of the sensors and the respective circuits. Modifying or repairing the internal circuits may impair the system's performance and void the Emerson product warranty.

Do not attempt to modify or repair the internal circuits or change their settings.

Warranty

1. Limited Warranty . Subject to the limitations contained in Section 2 (Limitation of Remedy and Liability) herein, Seller warrants that (a) the licensed firmware embodied in the Goods will execute the programming instructions provided by Seller; (b) that the Goods manufactured by Seller will be free from defects in materials or workmanship under normal use and care; and (c) Services will be performed by trained personnel using proper equipment and instrumentation for the particular Service provided. The foregoing warranties will apply until the expiration of the applicable warranty period. Sensors and detectors are warranted against defective parts and workmanship for 24 months from the date of purchase and other electronic assemblies for 36 months from the date of purchase. Products purchased by Seller from a third party for resale to Buyer (Resale Products) shall carry only the warranty extended by the original manufacturer. Buyer agrees that Seller has no liability for Resale Products beyond making a reasonable commercial effort to arrange for procurement and shipping of the Resale Products. If Buyer discovers any warranty defects and notifies Seller thereof in writing during the applicable warranty period, Seller shall, at its option, (i) correct any errors that are found by Seller in the firmware or Services; (ii) repair or replace FOB point of manufacture that portion of the Goods found by Seller to be defective; or (iii) refund the purchase price of the defective portion of the Goods/Services. All replacements or repairs necessitated by inadequate maintenance; normal wear and usage; unsuitable power sources or environmental conditions; accident; misuse; improper installation; modification; repair; use of unauthorized replacement parts; storage or handling; or any other cause not the fault of Seller, are not covered by this limited warranty and shall be replaced or repaired at Buyer's sole expense, and Seller shall not be obligated to pay any costs or charges incurred by Buyer or any other party except as may be agreed upon in writing in advance by Seller. All costs of dismantling, reinstallation, freight, and the time and expenses of Seller's personnel and representatives for site travel and diagnosis under this limited warranty clause shall be borne by Buyer unless accepted in writing by Seller. Goods repaired and parts replaced by Seller during the warranty period shall be in warranty for the remainder of the original warranty period or 90 days, whichever is longer. This limited warranty is the only warranty made by Seller and can be amended only in a writing signed by an authorized representative of Seller. The

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Contents

1 Introduction

The WinHost is a configuration and diagnostic software for the Rosemount 975 family of detectors: models 975HR, 975MR, 975UF, and 975UR. The software enables you to read information (such as address, status, serial number, type, setup, etc.) and to change the configuration of the detector.

1.1 Software overview

The WinHost software gives you the ability to:

- Communicate with the 975 flame detectors.
- Read status and setup parameters from the detectors.
- Change detector address.
- Record relevant detector's data to a log file.
- Perform a manual built-in test.

1.1.1 Minimum requirements

The following are the minimum requirements to operate this software.

- Compatible to a 586 AT
- Windows 98, XP, or 2000
- 500 mb RAM
- 500 mb hard disk free space
- 1.44 mb floppy disk drive
- Color VGA
- Isolated RS-485 interface card to be defined as COM1, COM2, COM3, or COM4 or RS-232/RS-485 converter to connect to a standard COM port.

2 Installation

2.1 Loading the software

The following are the steps required for loading your computer with the Rosemount 975 WinHost Configuration and Diagnostic software.

Procedure

1. Switch on the computer.
2. Insert the installation disk into the correct drive.
3. Start the WinHost software installation by running the file: *setup.exe*.
4. Follow the installation instructions.
5. Connect the detector unit to the RS-485 communication port (see Connecting the detector to the computer).
6. Start the WinHost software with specification of the COM port number as a parameter (see Establishing COM port used by the adapter).

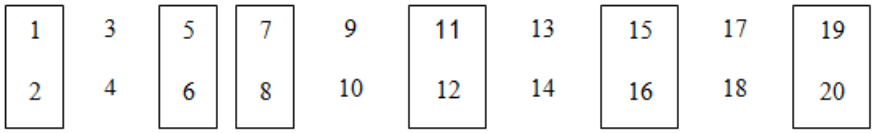
3 Getting started

3.1 Connecting the detector to the computer

Before you can perform any configuration or diagnostic operation on a detector, you must connect the computer to the detector using the harness cable provided. To connect the computer to a detector:

Procedure

1. Connect one end of the USB cable to the computer USB port.
2. Connect the other end of the USB cable to the USB serial (RS-485) adapter.
3. Connect the serial port of the adapter to the harness cable.
4. Connect the detector to the harness cable as follows:
   a) Connect one side of the cable to the detector's terminal 10 for RS-485 (+) and detector's terminal 11 for RS-485 (-).
   b) On the other side of the cable, connect a socket D-Type as follows:
      1. RS-485 (+) to pin #2
      2. RS-485 (-) to pin #1
      3. RTN to pin #5
5. The following is the USB adaptor setup.



   a) Unscrew the cover of the USB adapter and set the jumpers as follows:
   b) Close the USB adapter cover.
   c) Connect the cable.

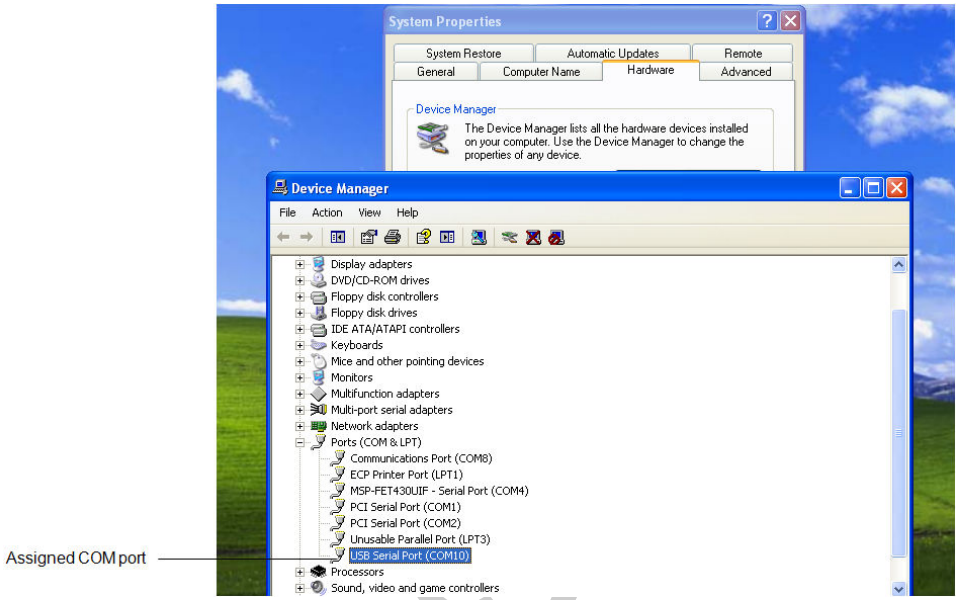
Note
If you use a different adapter than the recommended one, check that the wiring of the D-connector adapter is similar to the above. (If not, change the cable wiring to fit the chosen adapter).

3.2 Establishing COM port used by the adapter

Before using the software, you must establish the number of the COM port in order to run the software. This section describes how to establish the COM port used by the adaptor. To discover the COM port used by the adapter.

Procedure

1. Switch on the computer.
   Windows runs.
2. Select *Start* > *Settings* > *Control Panel* > *System* > *Hardware* > *Device Manager*.
   The COM port number is displayed. This is the COM port number with which you will work.



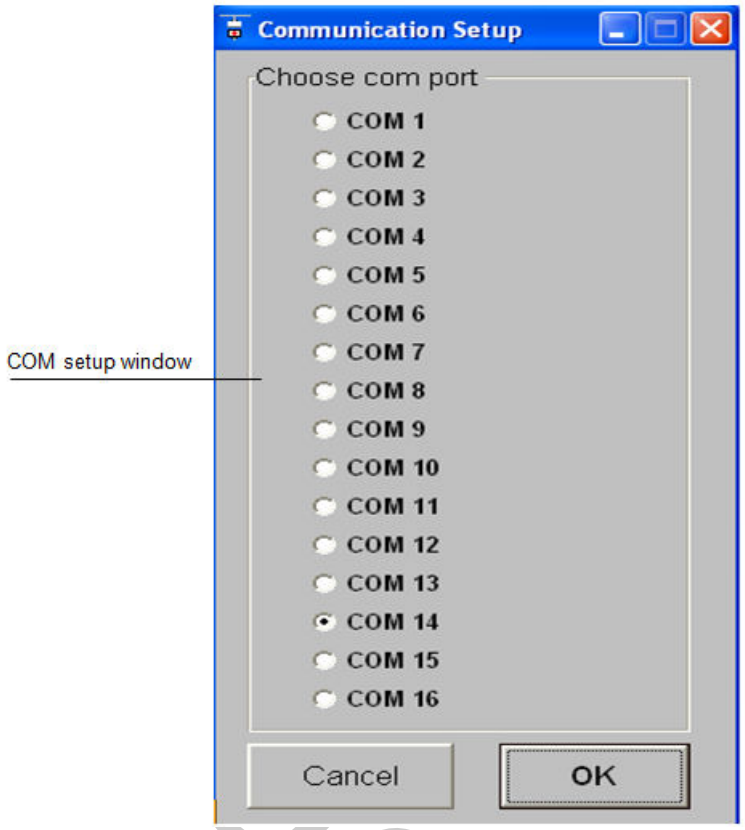
3.3 Running the WinHost

This section describes how to run the WinHost software. To run the WinHost software:

Procedure

1. Select *Start* > *Programs* > *Rosemount 975 Series*.
   The WinHost software application starts running. The welcome window appears. After a few seconds, the opening window disappears, and then the *Communications Setup* window appears.

Figure 3-1: Communication Setup window



The *Communication Setup* window allows you to select the communication port number. You are asked to choose the communication port number to work with.

2. Select the number of the communication port you want to work with.
3. Click *OK*.

4 Operate

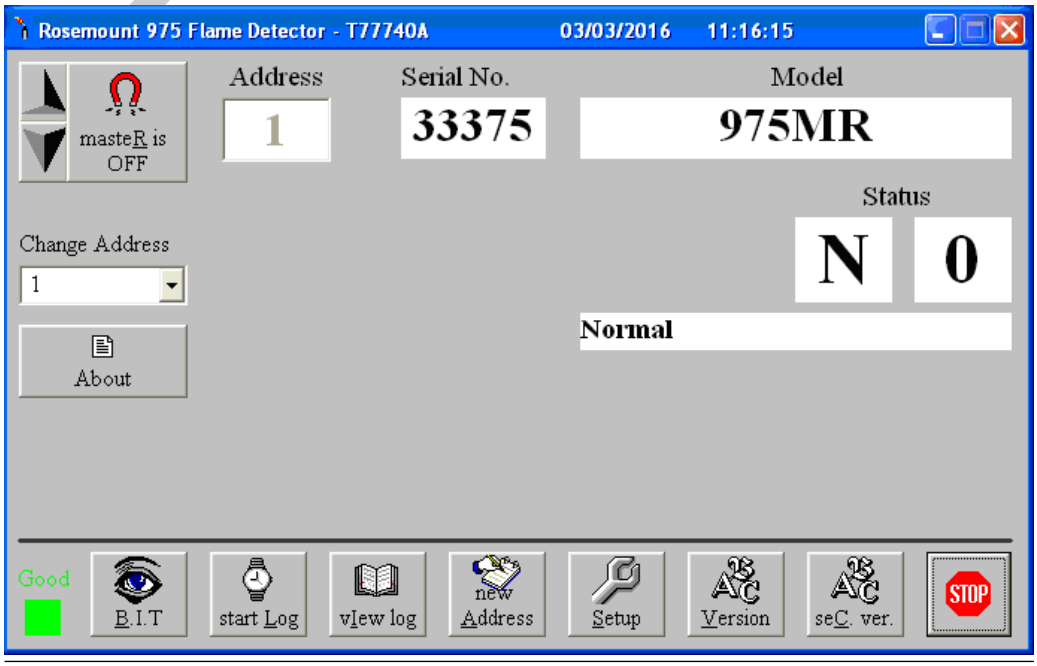
4.1 Main window

The *Main* window monitors the detector.

Figure 4-1 shows the *Main* window.

Note
For Windows XP or 2000 users, in case of bad communication, press the F12 key and wait until good communication is achieved.

Figure 4-1: Main window



The *Main* window is divided into two main areas:

- Display area: Displays various parameters of the detector.
- Toolbar: Enables access to various control and diagnostic features.

Table 4-1 describes the composition of the *Display* area in the *Main* window.

Table 4-1: Main window Display area

Element	Description
Address finding buttons 	Seeks the address of the connected detector. • The up and down arrows increment or decrement the address value by one, checking that address. • The *Master* button seeks the connected address from 1 to 247 (see Note).

Table 4-1: Main window Display area *(continued)*

Element	Description
Address	The address currently being looked at by the software (using the up and down arrows or the *Change Address* field).
Serial no.	The serial number of the detector. Each detector has a unique serial number.
Model	The model number of the detector.
Status	The current operational status of the detector.
Change address	A drop-down list that enables you to select the address location at which to seek the detector.
About	Opens a window that gives software version information.

Note
Only one detector should be connected when pressing the *Master* button.

Table 4-2 describes the buttons on the toolbar.

Table 4-2: Main window toolbar buttons

Button	Button name	Description
	Comm. status	Indicates the status of the communication between the detector and the computer.
	Built-in test	Starts a manual built-in test. The results appear in the status fields (applies to flame detectors only).
	Start log	Opens a dialog box that enables you to set up a log of the detector events.
	View log	Displays the log file.
	New Address	Opens a dialog box that enables you to set a new address location for the detector.
	Setup	Opens a dialog box that enables you to configure the detector.
	Primary micro software	Displays the version and details of the primary micro software.
	Secondary micro software	Displays the version and details of the secondary micro software.
	Stop	Closes the application.

4.1.1 Detector's statuses

The WinHost software displays the status in two fields, a letter field and a number field. The detectors have the following statuses:

Table 4-3 shows the statuses of the detector.

Table 4-3: Detector statuses

Characters	Description
D D	Disconnection
S 90	Startup
S 92	Restore from wrong voltage
N 0	Normal
W 0	Warning
A 0	Alarm
L 0	Alarm latch
T 0	Alarm delay
B 0	Built-in test
M 0	Manual built-in test
E 0	End of manual built-in test
N 7	Relay fault
N 8	Built-in test fault
V 83	Wrong voltage
Z 0	Benzene

4.2 Setup table window

This section describes the *Setup table* window and the various parameters that you can define. Depending on the type of detector you are configuring, different *Setup Table* windows are shown. To configure the detector:

Procedure

1. From the *Main* window, click the *Setup* button.

   The *Setup table* window appears, as shown in Figure 4-2.
2. Define the parameters as required.
   Full details of each available parameter can be found in Table 4-4.
3. Click the *Set* button or press *F3*.
   The detector is configured.

Example

The following is an example of the *Setup table* window for the 975MR detectors.

Figure 4-2: Setup table window for 975MR

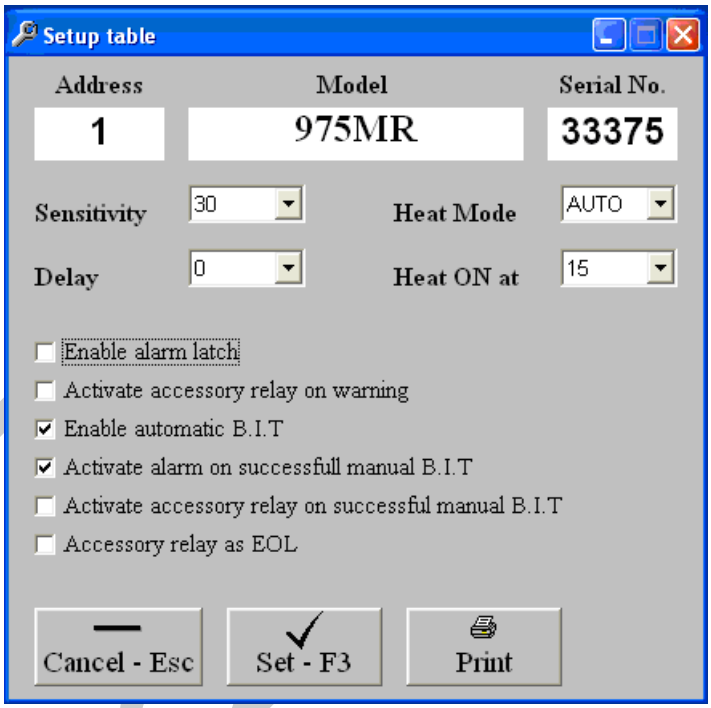


Table 4-4 details the *Setup table* window parameters.

Table 4-4: Setup table window parameters

Parameter	Description
Sensitivity	Sets the sensitivity of the detector. The values are given in meters. A higher number means greater sensitivity. (See Table 4-5 and Table 4-6).
Heat Mode	Demister settings for clearing condensation from the lens. Choose from *On*, *Off*, or *Auto*.
Delay	The delay between detection of a signal and activation of the alarm. Choose from *0*, *3*, *5*, *10*, *20*, or *30* seconds or *A* (anti-flare).
Heat On	Temperature at which the demister is activated if the *Heat Mode* is set to *Auto*.
Enable Alarm Latch	When selected, the alarm remains on even when the signal abates.
Activate Accessory Relay on Warning	When the detector's status is *Warning*, the accessory relay is activated.
Enable Automatic BIT	When selected, the built-in test runs automatically according to the built-in test settings.
Activate Alarm on successful manual BIT	Activates an alarm when a manual built-in test is successfully completed.

Table 4-4: Setup table window parameters *(continued)*

Parameter	Description
Activate Accessory Relay on successful manual BIT	Activates the accessory relay when a manual built-in test is successfully completed.

4.2.1 Detector sensitivity settings

The following tables list the detector's sensitivity settings.

Table 4-5: Sensitivity settings for the 975MR and 975HR

Setting	Sensitivity
15	50 ft. (15 m)
30	100 ft. (30 m)
45	150 ft. (45 m)
65	216 ft. (65 m)

Table 4-6: Sensitivity settings for the 975UF and 975UR

Setting	Sensitivity
20	65 ft. (20 m)

Note
Anti-flare mode is selected to prevent false alarms in locations where fast flares may be present. The time delay for a fire alarm in this mode is 2.5 + 12 seconds.

4.3 New Address screen

You can set a new address location for the detector. To set a new address location for the detector:

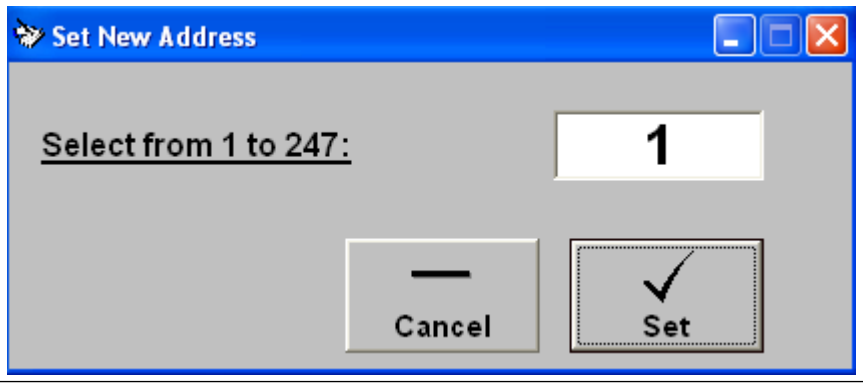
Procedure

1. In the *Main* window, click the *New Address* button.

   The *New Address* window appears.

   Figure 4-3: New Address window

2. Enter the desired address.

3. Click *Set*.

The new address is set.

4.4 Logging detector events

You can use the computer with the WinHost software to log the events of the detector for diagnostic and other purposes. When you start logging, you set the log file period in minutes. A line is subsequently written to the log whenever the number of minutes passes (say every two minutes) and whenever there is a change in the status of the detector.

Prerequisites

Each line in the log notes the following information:

- The detector serial number
- The detector address
- The detector status
- The date and time

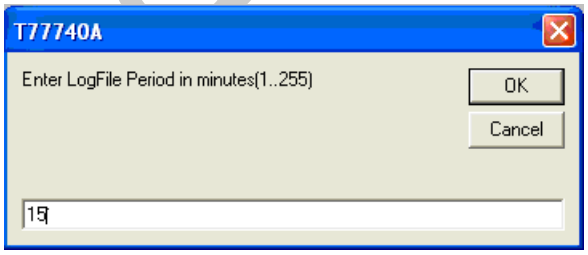
To log detector events:

Procedure

1. From the *Main* window, click the *Start Log* button.

   The *Log Record* dialog box appears.

2. In the text field, enter the log file period (in minutes).
3. Click *OK*.

Logging now begins, and a line is written to the log every time the log file period is over and any time there is a change in the detector's status.

4.4.1 Viewing the log file

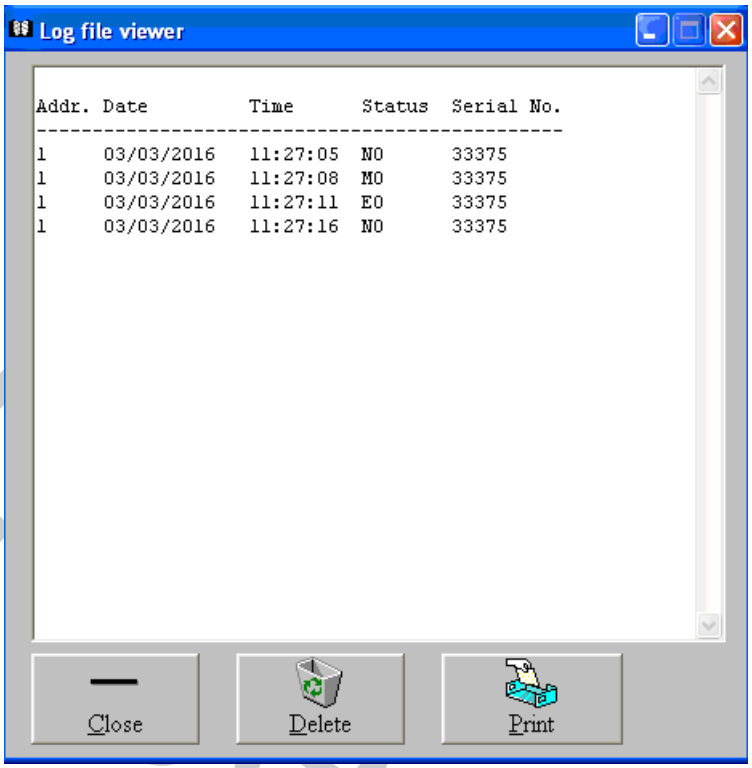
To view the log file:

Procedure

From the *Main* window, click the *View Log* button.

The *Log File Viewer* window appears.

Figure 4-4: Log File Viewer window



4.5 Running a manual built-in test

The software is set to run a built-in test on the detector every fifteen minutes. You can run a manual built-in test at any time. The results of a built-in test are displayed in the *Status* field in the *Main* window.

Procedure

In the Main window, click the *BIT* button.

The manual built-in test runs, and the results appear in the *Status* field.

4.6 Viewing the micro software version

You can view the versions of the primary and secondary micro software at any time. To view the versions of the primary or secondary micro software:

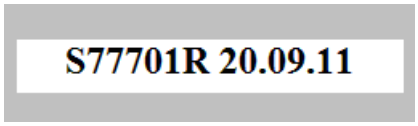
Procedure

Click the *Primary Micro Software* button 

or the *Secondary Micro Software* button.

A field appears in the *Main* window, displaying the software version.

Figure 4-5: Software version



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