



## Remote Capture – Version 4.0.0 for Vacuum Instrument Corporation MS-40, MS-50, and MS-60 Leak Detectors With UFT Option

### User Manual Rev. -

Document # 014275003

#### Program Requirements:

- A P.C with a Pentium Class CPU, 1 GHz or higher.
- 512 Mb of Ram.
- A graphics card or Internal Graphics capable of a resolution of 1024 x 768 or better, 1280 x 1024 is recommended.
- A Computer VGA Monitor capable of Resolution of 1024 x 768 or Higher, 1280 x 1024 is recommended.
- Microsoft @ Windows Operating System 2000 or higher, XP and Vista Compatible.
- A Printer is Recommended, but not required.

#### Synopsis:

This program will allow the user to capture information sent from the Leak Detector and log it to a text file for storage on a personal computer or PC. Once this software is installed in the PC, the only other requirement is a 9-Pin female to 9-Pin female Null Modem RS-232 cable to connect between the RS-232 port on the Leak Detector and one of the COM ports on the PC. The Remote Capture software lets the user select one of the COM ports available on the PC. If a Null Modem cable cannot be obtained, a standard 9-Pin female to 9-Pin female RS-232 cable can be used with a Null Modem adapter attached to one end of the cable. **Included with this package is a 6 ft. Null Modem cable.**

## Program Operation:

When "Remote Capture" is run, first the splash screen will appear briefly:  
The Splash Screen Below is Shown if the Ms40 is Selected from The Capture Setup Screen



**REMOTE CAPTURE FOR THE  
MS40 PORTABLE LEAK DETECTOR**

Loading Please Wait...  
CopyWright @ 2009

The "Settings" screen is then displayed.

The screenshot shows a software settings window titled "SETTINGS". It is organized into several panels:

- Components:** A list of items to be included in the log file, each with a checkbox. Checked items include Date Stamp, Time Stamp, Product Name, Product Part Number, Product Serial Number, Operator Name, Reject Setpoint, Leak Rate, Accept / Reject Status, and Test Number. The Lot Number checkbox is unchecked.
- Product Information:** Text input fields for Product Name, Product Part Number (123456789), Product Serial Number (987654321), and Operator Name (John Smith).
- Serial Port:** Radio buttons for Serial Port 1 (selected), Serial Port 2, and Serial Port 3.
- Serial Port Parity:** Radio buttons for No Parity (selected) and Even Parity.
- Print Out Log Files:** A checked checkbox for Print Log File Enabled and a Printer Setup... button.
- Leak Detector Model:** Radio buttons for MS40, MS50 (selected), and MS60.
- MS50 Mode:** Radio buttons for Normal (selected) and UFT Enabled.
- MS50 Port Style:** Radio buttons for Single Port (selected) and Dual Port.
- Capture Mode:** Checked checkboxes for End of Cycle Capture and Multiple Test Cycle.
- Test Cycle Control:** A checked checkbox for Start / Stop Control.
- Current Test Number:** A text input field containing "1" and a "Reset to One" button.
- Save Capture File As:** A text input field showing the path "C:\Repository\RemoteCapture2009\VB6\REMOTE CAPTURE2009\logs\logfile1.log" and a "Browse..." button.

*Note: The previous settings from the last time the program was run will appear as the initial settings.*

**Components:**

Check the box next to the data items to be included in the log. If an item is not checked, it will not appear in the log file.

**Product Name:**

Enter the Product Name here.

**Product Part Number:**

Enter the Product Number here.

**Serial Number:**

Enter the Product Serial Number here.

**Operator Name:**

Enter the Operator's Name here.

**Serial Port:**

Select the Serial Port to use for communication to the Leak Detector, Default is Serial Port 1

**Serial Port Parity:**

Select the Selected Serial Port Parity, default is None

**Model:**

Choose MS-40, MS-50, or MS-60

**MS50 Port Style:**

Select the Desired MS-50 Port Style, Single Port is Default.

**Normal / UFT:**

Select Normal mode, or UFT (Ultra Fast Testing) mode

**Start/Stop Control:** Check this box to enable starting/stopping the leak test from the remote computer (not available in UFT mode).

**End of Cycle Capture:**

If 'End of Cycle Capture' is selected, the PC will only receive test cycle information immediately upon termination of the test cycle. The leak rate, reject status and pressures that were recorded by the Leak Detector just before the test cycle was terminated will be stored on the PC.

If the user doesn't select "End of Cycle" capture mode, then the Remote Capture software will acquire data at the rate specified by the value of "Seconds Between Samples".

**Multiple Test Capture:**

Same as "End of Cycle Capture", but lot number check box is enabled, And lot number is available for output to the log file  
After a cycle is complete, the "End Lot" button will appear at the bottom of the Window Frame.

**Seconds Between Samples:**

In Normal mode, this value determines the how often the data will be captured and logged.

**Save Capture File As:** Here the user should select, or enter, the directory and filename where the log files will be stored. The default suggestion will be of the form "logfile?.log", where # represents the test number. Each time the Settings Screen appears, the software will attempt to increment the value of X by one. The default extension for this type of file is "log" (Comma Separated Values), however this suggestion can be overridden by entering any filename. For example, if the previous capture file was logfile1.log, then the default suggestion for the next test will be "logfile2.log". This is only a suggestion, and can be changed easily. If the same filename is entered, the user will be asked if the existing file should be overwritten or not.

**Note about Saved logfiles:**

If the File name is the same after the "End capture" or "End Lot" buttons are pressed on the Main Window Frame, the same filename will be used and opened for data append  
This will not destroy the old log file, but will add to the last entry in the selected log file.

-----

**Starting the capture:** To start the capturing, click the 'Start Capture' button at the bottom of the 'Settings Screen', and a new "Capture Screen" will appear, and the leak detector data stream capture will begin. If "UFT mode" was selected, or if the "End of Cycle Capture" box was checked, or if the "Start/Stop Control" checkbox was not checked, then the "Start" and "Stop" buttons will be unavailable.

**TEST CYCLE**

Start

Stop

Vent Testport

**CAPTURED VALUES**

Date: 7/30/2009

Time: 5:01:55 PM

Product Part Name: Product Name

Product Part Number: 123456789

Product Serial Number: 987654321

Operator Name: John Smith

Reject Setpoint:

Leak Rate:

Accept / Reject Status:

Test Number: 1

Leak Rate Units: Atm cc / Sec

Leak Rate Axis Color: Yellow

Reject Point Axis Color: Cyan

Graph: X-axis (0-100), Y-axis (0-10)

Zoom Scale: 1X

Zoom Scale

Auto Scale

Restore Scale

Show Captured Data on Screen

To terminate the capturing of data, the user must click on the 'End Capture' button. Next the software will create the log file. The End Capture Button Appears at the bottom of the Window Frame, If Multiple Capture Mode is selected, Then End Lot Button Appears at the bottom of the Window Frame.

#### Output Data Graph Synopsis:

The leak Rate, and Reject Point, if selected will Be plotted at one second Intervals on the Graph Display. Pressing End Capture, or End Lot Will stop the display if "Start next Test? Dialog is answered with no. Also Stop, will freeze the Graph Display

#### Output Data Graph Operation:

- Zoom Scale, Zoom the Graph if a Point on the Graph is clicked with the left mouse button There are three zoom factors, X1, X10, X25, the Graph rescales accordingly.
- Auto Scale, Auto scale the Graph will scale to the the minimum and maximum values on the graph.
- Restore scale, puts the Graph into manual mode (0 -10)
- Graph Position Slider, adjusts the Graph left and right, the data is re-drawn at the New position.

**Viewing the captured data:**

The log files can be imported into most leading spreadsheet programs because they are comma-delimited text files (also known as Comma Separated Values files).

After ending the capture, the following dialog box will appear:  
If the “Show Captured Data on Screen” check box is checked

Capture Count	Lot Number	Test Number	Test Date	Test Time	Product Name	Product Part Number	Product Serial Number	Operator	Leak f
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									

**Captured Data Output Synopsis:**

The Captured Data will Appear in the data cells of the Captured Data Output Spreadsheet

**Captured Data Output Operation:**

Clicking Ok, will quit this dialog

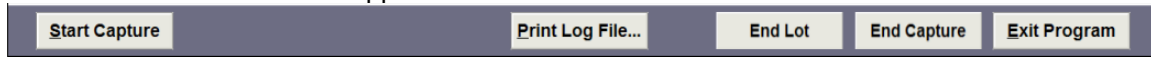
Clicking “Save Data as XLS File” will save the captured data as an Excel XLS File

With a filename of the log file selected in the capture setup dialog, but with an ?.xls file extension, where ? is the name of the last log file, without the file extension.

The Settings screen will reappear now, allowing the user to perform another capture.

### **Main Window Button bar:**

The main window Button bar appears as follows:



### **Main Window Button bar Operation:**

- Start Capture Button, starts the Data Capture and shows the Captured Output dialog box.
- Print Log File Button, Appears only if "Print Log File" is selected on the Capture Setup Dialog, if a printer is not selected a dialog will appear to select one. This happens three times before quitting. The last captured data will print out to the selected Printer.
- End Lot, Only appears if "Multiple Test Cycle" is selected on the capture setup Dialog, ends the current cycle, closes the log file and closes the Captured Output screen, Shows the settings screen.
- End Capture, ends the current cycle, closes the log file and closes the Captured Output screen, Shows the settings screen
- Exit Program, if a capture is in progress, will prompt the user to confirm the exit