# Mobrey LOG-VIEW

**Software Version 1.21**

*mobrey*

**EMERSON**
Process Management
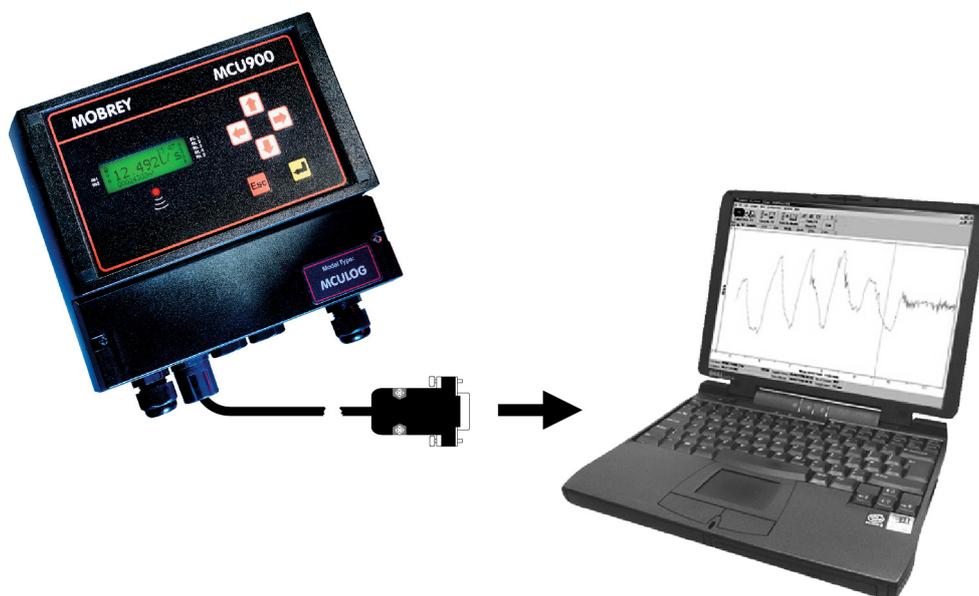
# MOBREY LOG-VIEW

## OPERATING MANUAL

## Contents

# Mobrey LOG-VIEW
## Version 1.21

## 1.0 Introduction

The Mobrey LOG-VIEW is a Windows-driven software package that works with the Mobrey MCU90F / MCULOG data logging system.

LOG-VIEW allows the user to download the stored data from the MCU90F / MCULOG to the user's computer either directly or over the telephone network using modems.

The data available includes up to 7000 sample values (4800 samples for the MCULOG), 60 daily totals and 60 maximum daily flow rates.

Within the software the data can then be used to produce reports, summaries and charts, tailored to the user's requirements.

Many of the functions available in LOG-VIEW can be selected in more than one way: by cursor, menu, function key or dedicated button. At the top of each section of this manual, there are details of the dedicated buttons and menu, the text in brackets being the top level menu.

For information on the MCU90F / MCULOG unit, please refer to manuals IP2030/OM and IP2030/Supp (available to download in Adobe PDF format from the Mobrey brand page at www.emersonprocess.com).

## 2.0 Software Installation

Mobrey LOG-VIEW is installed using a Windows installation program called Setup. This program creates any directories that may be needed and copies the program and other files required to run Mobrey LOG-VIEW into these directories.

Mobrey LOG-VIEW is installed into a program directory, by default 'C:\ LOG-VIEW'.

Finally, Setup creates a new item under the Program Manager so that the user can run Mobrey LOG-VIEW by clicking on the icon of the program.

### 2.1 Requirements to run LOG-VIEW

Mobrey LOG-VIEW is a Windows application program distributed on one CD-ROM. To install Mobrey LOG-VIEW, the following is required:

- An IBM compatible PC, with Microsoft Windows (3.1, 95, or later version) installed.
- A CD-ROM or DVD-ROM drive capable of reading a CD-ROM.
- Approximately 1MB of hard disk available.
- 1MB RAM

## 2.2 Installation

The user must start PC and wait until the Windows Desktop is visible. Then, insert the Mobrey LOG-VIEW CD-ROM into the CD-ROM drive and run the Setup program, which is accessed by double-clicking on the Setup application file on the CD-ROM as seen using Windows Explorer.



If **Start Setup** is chosen the screen will then ask where the program is to be installed. The default of C:\ LOG-VIEW will be displayed. If a different path is required then the user can make this choice at this point, by editing the **Install To:** text box.



After the default path or the custom path is chosen, press **Continue**.

The files are automatically installed on the PC. A LOG-VIEW icon will appear in the Program Manager.

The Mobrey LOG-VIEW package is now ready for use.

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## 3.0 Steps To Collect Data

Connect the PC to the MCU90F / MCULOG unit using the communications lead provided. If a different connection lead is required, please see Appendix A.

Start LOG-VIEW from the Program Manager. The following screen should be shown with a row of selection buttons across the top:
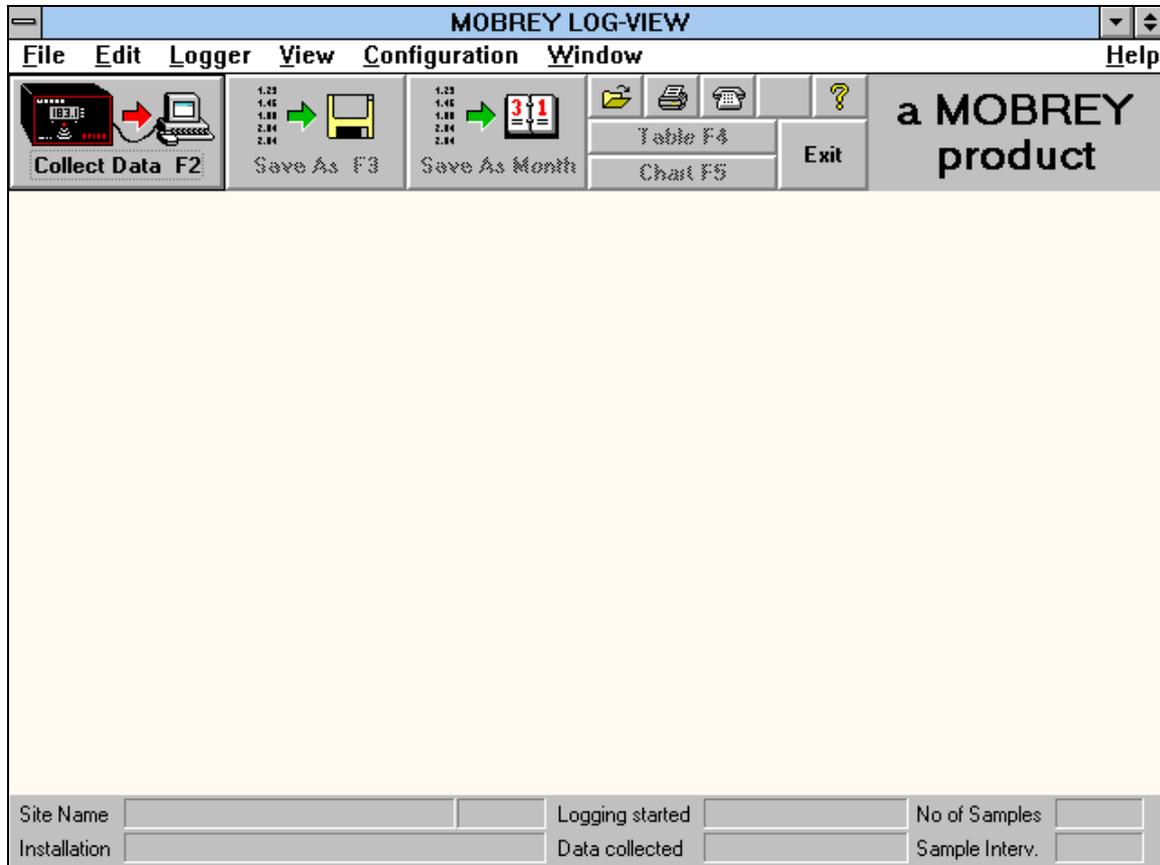


**Important:** *Ensure that the correct communications port is selected. There is a default setting that can easily be changed in the Serial Port command from the Configuration menu.*

Click on the  button or press F2 to collect all of the data from the MCU90F / MCULOG.

After collecting the data it may be saved in a 'CSV file'. Click on the Save Data button or press F3 (see section 5.0). Now you can quit LOG-VIEW and proceed to the next site to collect data.

See also section 10.0 for Data Collection via modems.

## 4.0 Saving Data

There are two formats for saving data. The first option is as the standard format (Section 4.1) in which case all the data collected is saved as one file. The second format saves the data in a monthly file (Section 4.2) and automatically joins together in one file, all the data from one month.

All of the LOG-VIEW data is in Comma Separated Values (CSV) format.

### 4.1 Save Data as CSV File Format (File Menu)

Same as:  from 

After you have collected Data from the logger, you should save it in a CSV File.
The "Save Data As CSV File" button displays a file dialogue box for you.

LOG-VIEW automatically offers you a filename that consists of the unique ID and a three digit number. That number is the next after the highest number found in the CSV sub-directory.

Note:   Data is saved with the current international settings of your PC.

### 4.2 Write/Add To Monthly CSV File (File menu)

Alternatively, the data can be saved in a monthly file.

Same as:  from 

A monthly file can be automatically built up from a number of data collections.  If a monthly file is not complete you can add data from subsequent CSV files that contain data from that month.

Note:   You can only append Data at the end of a file, not at the beginning or in the middle.

A Dialogue Box is displayed to give you information on which files will be created.
It includes a List Box "Monthly CSV File Actions".  This box shows all monthly file actions that could be possible for the current data. After each file one of four possible comments is displayed:

- No action
- Add data to file
- Create new file
- Error in file

LOG-VIEW automatically builds up the file names from the Unique ID (5 digits), Year (2 digits) and one letter for the month: A= January etc. When saving a data file which starts in February and ends in April, the dialogue box may say:

       0000213B.CSV = February 2013: No action
       0000213C.CSV = March 2013: Add data to file
       0000213D.CSV = April 2013: Create new file

## 5.0 Open Data (File menu)

Same as:  from 

The Open Data dialogue box is displayed to open an existing CSV file. LOG-VIEW keeps track of the documents you last worked on. You can quickly open one of the last 6 files used by selecting it from the bottom of the File menu. Alternatively, it can be opened in the normal Windows manner.

An example of a typical data file has been included in the CSV files sub-directory; it is named *example.csv*.

This example file was created with dates and numbers in the standard UK format. If the PC is set to a different format, the file may still be opened by using the **Open Data International** option from the File menu. A dialogue box will prompt for alternative date and number formats.

## 6.0 Table (View menu)

Same as:  from 

Select the table command/button to select the table window. Once data has been collected or loaded by opening a file it can be tabulated in several different ways:-

- **Sample Table**
  The Sample table contains the transferred data consisting of sample numbers, dates and times of samples, sample values and flags. The flags tell you whether there were any of the following actions within that sample period:
  ◊ FL = Fast Logging
  ◊ LE = Lost Echo
  ◊ LE+FL = Lost Echo and Fast Logging

  This table also shows information about a Power failure.

- **Header table**
  This table contains the information from the MCU90F / MCULOG header block or the CSV file header block.

- **Other table**
  This table gives information about Totaliser, Total Flow and Max. Flow values.

- **Day table (summary)**
  This table gives information about daily summaries. Summaries include values of Night Flow. The duration of the night may be defined in **Summary** in the **Configuration** menu

- **Day/Month table (summary)**
  This table shows all daily summaries for one month in one table.

- **Month table (summary)**
  This table shows the summary of one month.

Tables may be navigated by clicking the right mouse button or by selecting [ ], or simply by using the cursor keys.

## 7.0  Chart (View menu)

Same as: [ **Chart F5** ] from [toolbar: Collect Data F2, Save As F3, Save As Month, Table F4, Chart F5, Exit]

Select the chart command/button to select the chart window.  In this window the sample data or daily totals may be charted against a variety of timebases.  The different chart types are:-

- **Samples chart**
  Line chart of the sample data.

- **Total chart**
  Bar chart of the daily totals.

- **Daily chart**
  Chart of sample data for 24 hours. The 24 hour period does not necessarily have to start at midnight. For example you can chart data from 08:00 to 08:00 the next morning.

- **Weekly chart**
  Chart of sample data or Total data for 7 days. The first day does not necessarily have to be Monday. For example you can chart data from Wednesday to the following Tuesday.

- **Monthly chart**
  Chart of sample data or Total data for one calendar month.

- [ **Other** ] **(Chart bar)**
  Click on the [ **Other** ] button or press F7 to get a list of all available chart types there are. ie. Daily chart, Weekly chart, Monthly chart, "Between Specified Times" chart "Show All" chart and "Average day" chart.

- **Average day**
  This chart is available for the sample data and, for each time of the day, it plots the average value of all the samples in the data file.  So, for example, a chart of the typical flow for a month may simply be produced.

The appearance of the charts may be customised by selecting **Chart** via the **Configuration** menu or by clicking the right mouse button.  This also allows the addition of maximum and minimum limit lines as well as a cursor line which allows peaks and troughs to be identified accurately.

## 8.0 Print (File menu)

Same as:  from 

Displays the Print Dialogue Box.  It is possible to print out any of the tables, charts or summaries outlined below:-

- **Daily Summaries**
  You can select the days you want to print. The table "Day" and all Sample Data will be printed per Day.

  Note: A value in a rectangle indicates the number of missing samples due to a power failure.

- **Monthly Summaries**
  You can select the months you want to print. The tables "Month" and "Day/Month" will be printed for each month.

- **Current Chart**
  Prints the current chart with limit lines (if selected) but without the cursor line. The Current Chart option is disabled (greyed) if you have no chart view (window) of the data.

- **Print Buttons**
  There are two print buttons to specify the orientation for printing.

  Portrait: Prints with the short edge of the paper horizontal.

  Landscape: Prints with the long edge of the paper horizontal.

- **Setup Button**
  Show the Print Setup dialogue box.  It provides a list of installed printers, sets the default printer, and provides access to other printing options for the printer you select.

- **Chart Print Setup**
  Displays the Chart Print Setup Dialogue Box where the line or bar colour, line width, bar style, and the border width can be changed.

Note:   All changeable information can be saved in the configuration file.  On leaving LOG-VIEW the user is prompted whether changes should be saved.  The normal configuration file is called START.INI but others names may be used if more than one configuration is to be stored.

## 9.0  Site Database (Configuration menu)

Displays the "Site Database" dialogue box.  Every MCU90F / MCULOG has a unique ID which it sends to the PC along with the sample data.  This ID gives the software information about the site which assists in the presentation of the data in charts, tables and print-outs.  It is not essential that any data be entered but the fields listed below are particularly useful.

- Site Name - appears on the status bar and on print-outs
- Installation - appears on the status bar and on print-outs
- Phone no. - may be used to dial up the MCU90F / MCULOG via modem
- Sample Unit - appears on charts, tables and print-outs
- Totaliser Unit - appears on charts, tables and print-outs



**Dialogue Box Options**

### Add
To add a new site record to the site database. Therefore, you are asked to enter the Unique ID of the MCU90F / MCULOG, followed by the site data.

### Delete
To delete a record from the site database.  Select the Unique ID from the list by clicking on its entry in the list box, then press the Delete button.

**Note:**  The site database is saved in the SITEDB.SDB file in the LOG-VIEW directory and, if preferred, it can simply be edited or extended using an ordinary text editor.

## 10.0 Collecting Data via a Modem

Data can be collected from the MCU90F / MCULOG via a modem over the telephone network.

**Modem Bar (View Menu)**

Same as:  from 

By selecting this function the following toolbar will appear, prompting for a phone number to be entered:



### 10.1 Collecting Data with a Modem Link

Either type the number you want to dial into the white text box or select a phone number from the site database by clicking on the  button.

Click on the 'Dial Number and Collect Data' button to connect your PC to the Logger and collect the data. After data collection you are asked if you want to erase the Logger's sample data. You do not have to erase the sample data unless you want to save time at the next data collection. The modem link is automatically disconnected at the end of this procedure. You can click on the 'Hang up' at any time to break the connection.

Note: If the data collection times out or an error occurs during the data collection you are not offered the option to erase the sample data.

Tip: If you only want to erase the sample data you can save time if you cancel the data collection.

At the end LOG-VIEW hangs up automatically.

### 10.2 Hardware Requirements

The modem at the PC end should be able to operate at 9600 baud, with 8 data bits and Even parity using standard Hayes commands. If using an external modem, connect it to the PC serial port using the standard cable supplied with the modem.

The modem at the Logger end should have the same specification - the Motorola 3400 is recommended and is widely available. Connection between the Logger and the modem is made via the cable supplied with LOG-VIEW version MLV-M1. This cable is also available as a kit. Please consult the factory for details.

### 10.3 Settings

The default settings of LOG-VIEW should normally be correct for data collection. However it is possible to adjust the configurations of both the Serial Port and the Modem via the **Configuration** menu.
If you are running LOG-VIEW under Windows 95 you do not have to change the Windows 95 Modem Properties because LOG-VIEW does not use these settings.

If your modem does not dial a number successfully, try another program such as Terminal, Phone Dialler, Internet Dialler or CompuServe Dialler.

## 10.4  Troubleshooting

- check that the Logger is properly connected to the modem.
- check that the modem is switched on.
- check that no other program uses the same port as the one the modem is using.
- check that the dial tone is present.
- check that the baud rate selected is not higher than your communications port hardware allows. Use the default settings in the Serial Port Configuration dialogue box. Use a baud rate of 9600 to avoid problems. A higher baud rate does not speed up the data collection.
- Switch the modem off and on if it does not respond at all.
  If your modem is password protected you cannot dial a number with LOG-VIEW. Disable the password protection of your modem. Otherwise you can try do use another dialler software to establish the connection to the logger. Make sure that the dialler software has the same COM port configuration as LOG-VIEW. After the connection is established click on the 'Collect data' button to collect the data. Do not click on the 'Dial Number and Collect Data' button of the Modem toolbar. After collecting the data change back to your dialler software and hang up.
- At the Logger's end use a Hayes compatible modem to avoid problems.
- The Logger's modem should work at a baud rate of at least 9600.
- The MCU90F / MCULOG routinely re-configures the modem so that it is ready for data collection. Thus, after applying power to the Logger's modem, it could be up to 2 minutes before it is ready for data transfer.

# 11.0  Password Protection

**Access command (Configuration menu)**
LOG-VIEW can be used to Stop or Restart the MCU90F / MCULOG using the **Logger Control** function from the **Logger** menu. This control is password protected.  The user's password is entered using the **Access** function from the **Configuration Menu.**  Further users may be added and passwords may be changed.

- **Login**
  Some menu options are protected by user names and passwords. If you select such an option before you have logged in you are asked to login.

- **Logout**
  To log out the current user.

- **Change Password**
  This option is designed to allow ordinary users to change their own passwords.

- **Set Access**
  Displays the Edit Users dialogue box.  This dialogue box is designed to enable a 'supervisor' to manage LOG-VIEW users.

## 12.0  Help Contents (Help menu)

Same as: [?] from 

Executes the LOG-VIEW help file and shows the "contents" page.  This gives a comprehensive Help facility, but throughout LOG-VIEW there is context-sensitive Help available, either by local HELP buttons or by pressing F1.

## Appendix A

A cable is supplied with the MCU90F / MCULOG Data Logging System for connection to a PC serial COM port. However, see the table below if a custom connection is required.
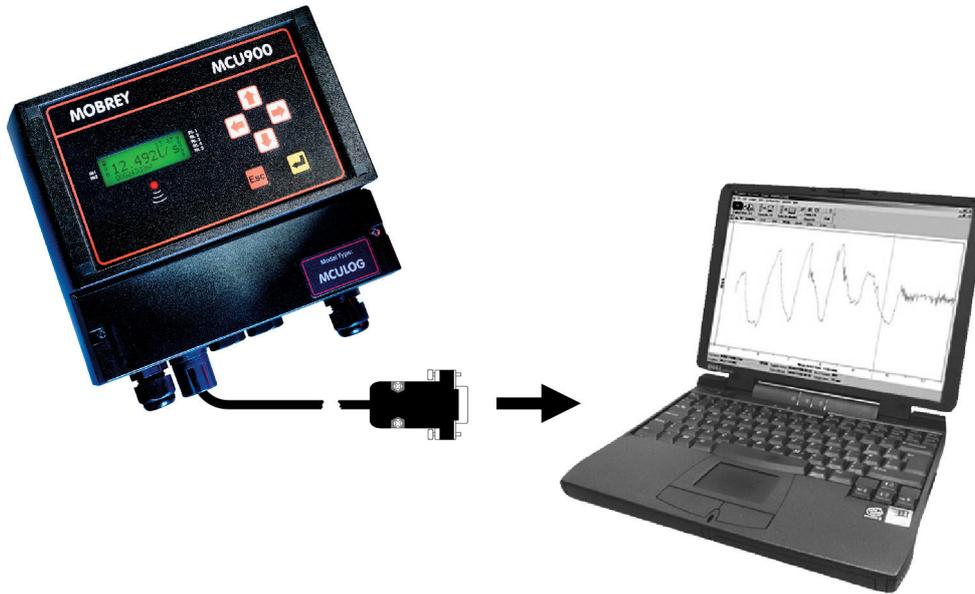


| Signal Function | Terminal Block on MCU90F / MCULOG | PC RS232 Port 9-Way Connection | PC RS232 Port 25-Way Plug |
|---|---|---|---|
| Logger Output | 5 (Tx) | PIN 2 | PIN 3 |
| Logger Input | 4 (Rx) | PIN 3 | PIN 2 |
| Ground | 6 (0V) | PIN 5 | PIN 7 |

# MCU900 Series

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**EMERSON**™
Process Management