# Poll-Ease<sup>™</sup>

# Remote Monitoring Software

# User's Guide

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### Chapter 1 | Poll-Ease Remote Monitoring Software Overview

Poll-Ease<sup>TM</sup> Remote Monitoring Software provides the ability to communicate with multiple sites monitored by remote monitors.

The Poll-Ease remote monitoring system is a full-featured remote monitoring package, designed to reduce the need for manpower in data collection and analysis. It works with existing control systems – delivering, to wherever it is needed, up-to-the-moment, accurate, information about any conditions being monitored.

The Poll-Ease remote monitoring system enables operations and maintenance management personnel to monitor current and historical conditions at remote locations and produce easy-to-read reports.

The ability to monitor conditions from a remote location results in substantial savings in travel time and associated costs.

Poll-Ease Remote Monitoring Software simplifies the task of managing hundreds of remote sites. It works together with the entire line of remote monitoring and control systems to create an easy-to-use, wide-area monitoring network.

Typical remote monitoring applications include:

- 1) Tank Level Monitoring
- 2) Tank Inventory
- 3) Equipment Monitoring & Diagnostics
- 4) SCADA via Telephone or Cell Phone

The Poll-Ease remote monitoring systems were designed and engineered to make complex data acquisition tasks simple. With Poll-Ease Remote Monitoring Software, you can automatically collect and store data from hundreds of remote sites. Alarm status is indicated graphically. Once set up, Poll-Ease Remote Monitoring Software can run automatically in an unattended mode or it can be run interactively by non-technical personnel.

The Remote Monitoring System linked to Poll-Ease Remote Monitoring Software, enables you to:

- § View the status of hundreds of remote sites.
- § Diagnose problems from your office.

- § Automatically collect and archive important performance and diagnostics data.
- § Share data with spreadsheet, billing, and other software.

Who Can Use Poll-Ease Remote Monitoring Software?

Despite its advanced capabilities, Poll-Ease Remote Monitoring Software is easy to learn and simple to use.

Successful utilization of the Poll-Ease remote monitoring system depends on:

- § A working familiarity with personal computers and Windows®-based software.
- S A commitment to learning what Poll-Ease Remote Monitoring Software can do and understanding how it can work for you. As you first get started, we suggest using the software and manual together, whenever possible.
- S Utilization of good computer work habits, such as closing programs before turning off your computer and having a formal plan of backing up your data.

### Chapter 2 | Getting Started

This chapter includes information that will help you put Poll-Ease Remote Monitoring Software to work for you. It includes system requirements and installation procedures as well as information about using the documentation and other available Help facilities.

#### Using the User's Guide

This User's Guide is your road map to the capabilities of Poll-Ease Remote Monitoring Software. It has been organized in a way that more than likely parallels how you will use the system after you have installed the software and set up your communications link. Topics include:

- § Entering site and input setup information.
- § Scheduling automatic data collection.
- § Using the site map.
- § Monitoring your sites.
- § Handling alarms.
- § Analyzing the data.
- § Producing reports.
- § Customizing Poll-Ease Remote Monitoring for your needs.

Obviously, you are not locked into this order of learning or using Poll-Ease Remote Monitoring Software. Other than installation of the software, specification of remote site information, and configuration of your inputs, each section in the User's Guide stands on its own.

You are encouraged to have the system work the way you work. The software has been designed to be user friendly and accommodate your habits and workflow.

We welcome comments and suggestions that will make future versions of this User's Guide even more reflective of your needs.

#### **Style Conventions**

This Poll-Ease Remote Monitoring Software User's Guide is written to be understood by the people who typically use Poll-Ease Remote Monitoring Software and is not necessarily for the computer professional.

As such, we have minimized the use of traditional documentation conventions that, while "second nature" to the computer pro, creates hurdles for the rest of us.

What you will find in this User's Guide:

- § Each process will be numbered "1), 2), 3), ..." and explained step-by-step.
- § Helpful information about a step will follow that step and appear in this font style.
- **§ D** Important information will appear bold proceeded by an arrow.
- *§ Information intended to provide additional understanding about a step will appear in italic.*
- S Various elements on the desktop, such as menus, commands, dialog boxes, buttons, etc., appear in **bold** and **Title Caps.** Their descriptors appear in roman, lower case. For example, the **File** menu, **Options** dialog box, and **OK** button.

#### System Requirements

Before installing Poll-Ease Remote Monitoring Software, be sure your computer meets the following hardware and software requirements:

- § A personal computer with a 150 MHz or higher Pentium processor.
- S Microsoft<sup>®</sup> Windows<sup>®</sup> 95 or Windows<sup>®</sup> 98 operating systems (with Service Pack 1 or 2 installed), or Windows NT<sup>®</sup> 4.0 operating system (with Service Pack 3 installed).
- § 32 MB RAM.
- § Hard disk with 100 MB to 2.0 GB (or more) of free space, depending on your data collection and storage requirements.
- § CD-ROM drive (or network access to a CD-ROM drive).
- § A SGVA display monitor with 800 x 600 (or higher) resolution.
- § An internal or external Hayes-compatible modem, 2400 baud or higher.

The following items, although not required, will enhance the reliability and performance of your Poll-Ease remote monitoring software:

- § Color printer (Hewlett-Packard HP DeskJet 1600C or equivalent).
- § A tape or CD-ROM drive back-up system supported by Windows.
- § Uninterruptible power supply.
- § Fast display adapter with 2.0 MB+.

- § A SGVA display monitor with 1024 x 768 resolution.
- § Surge-protected power and telephone outlets.

#### Installing a Modem

A modem is required for telephone-line access to the remote monitors. Poll-Ease Remote Monitoring Software is designed to access any internal or external modem connected to one of the computer's serial communications ports.

Poll-Ease Remote Monitoring Software can use the Windows Telephony Services if a modem was installed by the Windows **Install New Modem Wizard**. For Windows 95, simply connecting a modem prior to turning on the computer will cause the plug and play modem installation wizard to run. Otherwise, from the Windows Control Panel (**Start** menu, **Settings**), double click the **Modems** Icon and click **Add**. Portable computers typically use PC Card (PCMCIA) type modems and the same basic procedures apply.

## **D** These instructions are not intended to be specific. Please consult your hardware manufacturer's installation guide.

Installing Poll-Ease Remote Monitoring Software

The following instructions are designed to ensure simple installation of Poll-Ease Remote Monitoring Software.

Poll-Ease Remote Monitoring Software includes an automated installation program that will create a program directory and guide you through the steps with on-screen directions.

This installation program will:

- § Transfer files from the Poll-Ease Remote Monitoring Software compact disc to a folder that is created on your hard disk.
- § Create an item on your Windows Start menu.
- § Add an icon to your desktop.
- § NOT overwrite existing site databases.

#### " To install Poll-Ease Remote Monitoring Software

- 1) Close all applications.
- Insert the Poll-Ease Remote Monitoring Software compact disc into the CD-ROM drive. The installation program will automatically start and take you through the Poll-Ease Remote Monitoring Software installation process.



If this screen does not appear, perform the following steps -

Click **Start** on the Windows desktop and then click **Run**. Click **Browse** to locate the setup program, or type the CD-ROM drive letter and name of the setup program in the **Run** dialog box – "d:\setup.exe" (d is the CD-ROM drive letter and setup.exe is the name of the setup program). Click **OK**.

You should now be at the Poll-Ease Remote Monitoring Software installation screen.

3) To start the installation, press Next.

#### **Þ** You can press Cancel at any time to terminate the installation.

You will be asked to select a destination directory for Poll-Ease Remote Monitoring Software files. It is recommended that you use the default location provided by the program.

4) Press Next.

You will be asked if you want to create a backup copy of the files replaced during the installation.

- 5) Click Yes and then press Next.
- 6) You will be asked to select the directory in which these replaced files will be copied. It is recommended that you use the default location provided by the program.
- 7) Press Next.
- 8) You are now ready to install Poll-Ease Remote Monitoring Software.
- 9) Press Next to begin the installation.

10) The **Installing** dialog boxes will follow the progress of the installation. This process will take a few minutes. An **Updating System Configuration. Please Wait** notice will appear and remain for a short time.

When the software installation has been successfully completed, this screen will appear.



11) Press **Finish** to exit the installation.

If you are asked to restart the system in order to complete the installation, follow the on-screen instructions. You may have to repeat this installation procedure after Windows restarts.

Uninstalling Poll-Ease Remote Monitoring Software

#### " To uninstall Poll-Ease Remote Monitoring Software

- 1) Click the **Start** button on the taskbar.
- 2) Click **Settings**.
- 3) Click Control Panel.
- 4) From the Control Panel, double-click Add/Remove Programs.
- 5) From the **Add/Remove Programs** dialog box, click **Poll-Ease Remote Monitoring Software** in the software list.

- 6) Click **Add/Remove** to uninstall.
- 7) In the **Uninstall Poll-Ease Remote Monitoring Software**, you will be asked to choose an uninstall method. Choose **Automatic** to remove all files, or **Custom** to allow selection of files.
- 8) Follow the on-screen instructions. It is recommended that you accept all the default selections.

All files created during installation will be removed including the sample site database, even if new sites were added. Use the **Database Maintenance Automatic** command to backup database file to "c:\dbBackup" and optionally copy to tape. New site databases and other files created after installation are not removed, but may be manually removed using the Windows file explorer.

#### Starting and Using Poll-Ease Remote Monitoring Software

#### To begin using Poll-Ease Remote Monitoring Software, do one of the following:

- § On the Windows desktop, double-click Poll-Ease Remote Monitoring Software icon to start.
- S On the Windows task bar, click the **Start** button, then point to **Programs**, folder, and click the **Poll-Ease Remote Monitoring Software** command.

#### **Communications Setup**

Poll-Ease Remote Monitoring Software requires a modem to be connected to your computer for communications to remote monitors.

The **Communications** menu contains a **Use Telephony Services** command, which, when checked, enables the use of a Windows-installed modern. When **Use Telephony Services** is un-checked, this software will use its own internal method for finding and configuring the modern.

Each method has its own benefits. Choose the one that works best for you. By default, Telephony Services are not used. If you want to use location-dependent dialing (automatic area code/country code), this feature is only available when the **Use Telephony Services** command is checked.

#### Internal Modem Access Method

When **Use Telephony Services** is un-checked, Poll-Ease Remote Monitoring Software will automatically locate the first available modem and "find" correct modem initialization commands appropriate for the remote monitor being called. This information is stored permanently and displayed in the **Modem Setup** dialog box, which may be modified by the user, if necessary. Each time a call is made, the modem is configured according to the requirements of the remote device and/or the user's intentions. The user must specify the correct alarm **Auto Answer Rate** and **Dialing** mode – tone or pulse.

The Properties command on the Communications menu opens the Modem Setup dialog box.

Modem Properties X
└ Modem Settings
300 bps
1200 bps
2400 bps \\N0&Q6%C0B0N0 S37=6 S36=3
All Rates
Comm Port Auto Answer Rate Dialing OK
COM1
C Pulse Cancel

Windows Telephony Services

When **Use Telephony Services** is checked, Poll-Ease Remote Monitoring Software will expect to find a Windows-installed modem. If you wish to use the Telephony Services, follow the procedure below to properly configure your modem.

From the Windows Task Bar, click **Start**, **Settings**, and then **Control Panel**. In the Control Panel, double-click **Modem** to open the **Modem Properties** dialog box. If no modems are listed, click **Add** to open the **Install New Modem** dialog box and respond as required to dialog box questions.

#### The Remote Monitors require that Error Control is disabled.

From the **Modem Properties** box, click the modem being used and then click **Properties**. Click the **Connection** tab and click **Advanced**. In the **Advanced Connection Settings** dialog box, clear (disable) the **Use Error Control** check box, and press **OK**. This is the modem that must be specified in Poll-Ease Remote Monitoring Calling Properties "Connect (Error Control OFF)" field.

If your RMU is capable of 33,600 bps operation, or if other communications software uses a modem, you must add another modem, using the same COM port as specified above, except that Error Control is **enabled**, following the procedure above. This is the modem that must be specified for the Calling Properties "Connect (Error Control ON)" field.

The appropriate modem setup will be automatically chosen, depending on the model of the remote monitor being called.

If you haven't specified dialing preferences (area code, etc.), click **Dialing Properties** and enter your dialing information into the dialog box. Click **OK** and then click **Close** in the Modem Properties box to complete the task.

From the Poll-Ease Remote Monitoring Software **Communications** menu, choose **Properties** to open the **Calling Properties** dialog box. Dialing Properties may be modified from the Poll-Ease Remote Monitoring Software Calling Properties box.

Calling Properties		×
Calling From Location	Default Location	Configure
Connect (Error Control OFF)	Standard 14400 bps Modem	Configure
Connect (Error Control ON)	Standard 14400 bps Modem	Configure
Automatic Answer	Standard 14400 bps Modem	Configure
	OK Cancel	

The location your are calling from may be selected by clicking on the desired location in the dropdown list. The **Calling from Location** list may be added to or the selected location may be permanently modified by clicking **Configure**.

In the **Connect** box, select the modem to connect to the remote monitor according to the modem's error control setting (as described above). You may verify the modem's properties by clicking **Configure**. Changes to the modem's properties will not be restored when Poll-Ease Remote Monitoring Software is restarted. Use the **Control Panel Modem Properties** to make permanent changes as described above.

Specify the modem to be used for automatic alarm answer, which is compatible with all remote monitors programmed to initiate an alarm dial out call.

Direct Connection (RS-232)

Select Site for User Int	eractive Session	
- Site Selection	WFLOOMIS2BFP2A	
- Site Information		ОК
Company Name	ABC Power Company	
RMU Name		Cancel
RMU Location	Battery #2 BFP2A	
RMU Phone #		
Last Time Called	12/4/96 1:36:06 PM	
Log Period (m:s)	20 : 0	
- Calling Properties		
From Location	Default Location	Configure
Connect Using	СОМ1	Configure

The remote monitor supports a direct serial connection using the RS-232 communications (COMM) port of the computer. Direct connection is desirable for on-site support and diagnostics applications or when the use of a telephone line is impractical. A "straight-through" serial cable, with two nine-pin "D"-type connectors (one male, one female), is required. By choosing any available communications port (one to nine) from the **Connect Using** box in any of the **Select Site for ...** dialog boxes, you can initiate a "call" directly to a locally connected remote monitor.

The port settings may be modified by clicking the **Configure** button to the right of the **Connect Using** box. Port rates above 4800 bits per second (bps) require flow control. Select the **Use Flow Control** check box and click **Hardware** (**RTS/CTS**). Only units capable of 33,600 bps modem operation support serial port rates higher than 4800 bps. Software flow control is not supported in any case.

COM1 Settings		×
Port <u>Rate (bps)</u> 4800	Use <u>Flow Control</u>	ОК
4000	C Software (XON/XOFF)	Cancel

#### Tested & Approved Modems

Almost all modems will work with Poll-Ease Remote Monitoring Software. The following modems, however, have been tested and are known to work.

External Modems

- § Hayes ACCURA 336 Voice Modem
- § Hayes ACCURA 288 V.34 +Fax
- § Hayes Smartmodem OPTIMA 288 V.34/V.FC +Fax
- § Practical Peripherals PC288LCD
- § Practical Peripherals FXMT14400
- § Boca V.34
- § Cardinal 33.6 V.34/V.FC +Fax
- § Intel 144/144e
- § US Robotics Sportster

Internal Modems

§ Prometheus 14.4 Data Faxmodem

PC Card (Laptop) Modems

- § US Robotics MegaHertz 33.6 (XJ4336)
- § 3COM EtherLink III

Many other generic high- and low-speed modems have been tested successfully with Poll-Ease Remote Monitoring Software.

#### **Executing Commands**

Most common commands can be executed by using one of the toolbar buttons described below. **The relevant toolbar button will be illustrated when such a shortcut is available to you.** The other commands — accessed through a command menu — are described in detail in the command reference section at the end of this Guide.

Poll-Ease Remote Monitoring Software									
<u>File D</u> atab	ase <u>S</u> ites	Communication An	alysis <u>R</u> eports	<u>S</u> tatus <u>W</u> ind	low <u>H</u> elp				
Ø	٢			8	8	۵		<b>1</b>	
Sites	Scheduler	Real Time Histor	ical Print Char	Reports	Site Map	Get Log	HangUp	Alarms	



**Sites -** This command is used to add, delete or modify site information in the site database. *Refer to Chapter 3* / Accessing the Site Database *for further information*.



**Scheduler** – This command starts or stops scheduling of calls to remote sites for data log download. *Refer to Chapter 5* / Automatic Data Collection *for further information*.



**Real-Time** – This command is used to get real-time data for all inputs in both a "moving graph" and text format. The information graph is refreshed continuously from the remote site.



**Historical** – This command is used to select a site and date range to display historical data from a site. All inputs are displayed on one "zoomable," printable graph. *Refer to Chapter 8* / Producing Reports *for further information*.



**Print Chart** – This command is used to print a graph currently being displayed.



**Reports** – This command is used to view and print all report pages except for data plots. *Refer to Chapter 8* / Producing Reports *for further information* 



**Site Map** – This command is used to display a map of all site locations and indicates alarm condition of each by a color-coded icon. *Refer to Chapter 7* / Using the Site Map *for further information* 



**Get Log** – This command gets a data log from the selected remote site and stores it in database.



Hang Up – This command is used to immediately terminate any "on-demand" call.



Alarms – This command enables automatic alarm dial-in answering and logging. *Refer to 0* 

#### **On-Line Help**

The features of Poll-Ease Remote Monitoring Software are documented in detail in this printed User's Guide. Extensive on-line help is also available through the Help menu. Changes to the documentation can be found in a readme.txt file located in the installation folder.

## Chapter 3 | Accessing the Site Database

Poll-Ease Remote Monitoring Software maintains a central repository of information – a database – that contains information about your remote sites. The information in this database includes remote monitor setup and related site information as well as the complete history of activity for each monitored site.

Poll-Ease Remote Monitoring Software incorporates a robust database engine developed by Microsoft Corporation. The database supports high-end functionality, including multi-user support, remote access, and automatic database maintenance. Being a Microsoft Corporation "standard," the database is compatible with numerous third-party software packages.

The information in this database is used for reporting, analysis and a variety of other purposes. Although Poll-Ease Remote Monitoring Software handles much of the database work for you, a basic understanding of its use and operation will enable you to better utilize your investment.

#### Site Database

The entire Poll-Ease Remote Monitoring Software database is contained in a single file, with an ".mdb" file name extension. This "start-up" sample database contains a small amount of sample data. This database can serve as your primary database — simply add new sites to it or create a new database with a different name. Although only one database is needed (regardless of how many locations are being monitored), you may want to create multiple databases to segregate classes or owners of equipment.

#### " To create a new database

- 1) On the **Database** menu, click **New**.
- 2) In the **Create New Database File** dialog box, type a new file name, followed by the .mdb extension.
- 3) Click Open.

#### Site Setup

#### " To add new site information



- 1) On the Sites menu, click Site Setup or on the tool bar, click Sites.
- 2) Choose the **Site Selection** tab. Click **Add**. In the **Site ID** box, enter a unique 16-character site identification name.

🔇 Site Setu	p - LOOMIS-	2BFP2A-1						×
Site Selection	Site Information	Remote Monitoring Unit (RMU)	Call Scheduling	Site Address	Contact Information	Alarm Phone Numbers	Notes	
		Site ID	LOOMIS-2	I D	elete	]		
Sites <u>F</u> irst	<u>U</u> p	<u>D</u> ow	/n <u>L</u>	ast	abs < <u>B</u> ack	<u>N</u> ext >		Close

3) Choose the Site Information tab. This tab contains information that describes the facility and equipment being monitored. Enter the requested information. Also enter the Remote Monitoring Unit (RMU) Location (the location of the RMU within the facility) as well as the RMU Phone # (the telephone number used by Poll-Ease Remote Monitoring Software to establish a connection with the RMU).

Site Setup - LOOMIS-2BFP2A-1	
Site Selection Site Information (RMU)	Jnit Scheduling Site Address Information Numbers Notes
Company Name	Penn Jefferson Company
Facility Name 1	W F Loomis Plant
Facility Name 2	ancaster, PA
Equipment Model	HL-BF1-11
Equipment Serial # 🛛	1223348
RMU Location	Jnit # 2A-1
RMU Phone #	
Sites <u>F</u> irst <u>U</u> p <u>[</u>	20wn Last Close Close

4) Choose the **Remote Monitoring Unit (RMU)** tab. Select the correct **RMU Model** from the drop down list.

😌 Site Setup - LOOMIS-2BFP2A-1 🛛 🔀
Site         Site         Remote Monitoring         Call         Site Address         Contact         Alarm Phone Numbers         Notes           Unit (RMU)         Site Address         Site Address         Contact         Numbers         Notes
RMU Model Communicator 860 (2400 bps)
RMU Name Tank #1
RMU ID 11298778 Serial # 11298778
Password Confirm
Time Offset
Log Period (m:s) 1 🚍 : 0 🚍
Access Mode Telephone Line Input Setup
Tabs
Eirst Up Down Last Close Close

- 5) Enter an **RMU Name**. Assign an **RMU ID** (usually the serial number of the RMU), a property tag number or an account number. The RMU ID is used to identify the remote site during alarm dial-in.
- 6) Enter the **Password** required to access the RMU. The factory default is eight ones ("11111111"). You may change this if you wish. (Please refer to the Remote Monitor Users Guide.)
- 7) Enter the **Time Offset** (in hours) to specify the time difference between the local time of the RMU and your local time.
- 8) Specify the **Log Period** according to the nature of the input signal and/or the desired frequency for logging the data.
  - 9) Set the Access Mode to Telephone Line for a RMU connected directly to the telephone line and Gateway for a RMU connected by RS-232 serial cable to another RMU connected to the telephone line.

Gateway should be selected only if the remote site has two RMUs, where the second RMU is connected by RS-232 cable to the master (primary) RMU, which is connected to the phone line. When Gateway is selected, data will be collected from the slave (secondary) RMU. You must create two separate sites to handle each.

- 10) At this point, you may wish to click **Input Setup** and configure each of the inputs attached to the remote monitor.
- 11) Click the Site Address tab and type the requested information. Site icon placement on the site map will be "geo-coded" according to zip code if located in the United States and Longitude and Latitude fields are blank.

🌎 Site Setup - LOOMIS-2BFP2	YA-1					×
Site Selection Information Monito	emote oring Unit Scheduling	Site Address	Contact Information	Alarm Phone Numbers	Notes	
Address1	123 Main Street			_		
Address2						
City	Parkesburg		State PA			
Country	USA	Zip 1	9365			
Longitude	-75.94493347195					
Latitude	39.91539658599					
Sites <u>F</u> irst <u>U</u> p	Down L	ast	rabs <u> &lt; B</u> ack	<u>N</u> ext >		Close

If a remote site is outside the USA or if zip code is unknown, enter an approximate **Longitude** and **Latitude** (e.g. –90 and 25, respectively, for the Gulf of Mexico), then re-locate the icon on the site map by holding the **CTRL** key while dragging the mouse pointer to the new location.

12) Click the **Contact Information** tab and type the name and other requested information about the individual responsible for the monitoring equipment at the remote site.

🔇 Site Setup - LOOMIS-2BFP2	A-1	X
Site Selection Information Monito	mote ing Unit Call Site Address Contact MU) Contact	Alarm Phone Notes
Contact	Joe Smith	
Phone	999-555-1212	
Fax	999-555-1212	
Email	jsmith@plant.com	
Sites	Tabs	
<u> </u>	<u>D</u> own <u>L</u> ast <u>K</u> ack	Next > Close

🔇 Site Setup - LOOMIS-2BFP2A-1	
Site Selection Site Remote Call Information (RMU) Scheduling	Site Address Contact Information Phone Notes Numbers
Name # 1 You Name # 2 Me Name # 3	Number # 1 555-1212 Number # 2 444-1111 Number # 3
Name # 4	Number#4 Number#5
Name # 6	Number # 6 Number # 7
Sites	Number # 8
	Last Close

13) Click the **Alarm Phone Numbers** tab and type the name and phone number of those individuals to be called – in the sequence they are to be called – when an alarm occurs.

14) Click the Notes tab and type requested site information.

🔇 Site Setu	p - LOOMIS-	2BFP2A-1						×
Site Selection	Site Information	Remote Monitoring Unit (RMU)	Call Scheduling	Site Address	Contact Information	Alarm Phone Numbers	Notes	
	Note	es Productu	isage is inci	reasing		_		
		i ioducio		casing:				
Sites					abs			
Eirst	<u>U</u> p	<u>D</u> ow	m <u>L</u>	ast	< <u>B</u> ack	<u>N</u> ext >		Close

Input Setup

The information entered in this section is used to specify input configuration and provide scale to engineering units for data plots and for use by the remote programming function.

#### " To set up an input

- 1) On the Sites menu, click Input Setup.
- 2) Choose the Input Selection tab. Select an input from the Input Number box.

🜎 Input Setu	ip - LOOMIS-2BI	FP2A-1, Input	1					×
Input Selection	Remote Monitoring Unit (RMU)	Sensor Information	Tank Information	Plot Parameters	Plot Colors			
	Comp	any Name 🔽		enn Jefferson	Compony			
	Comp		F	enn Jellerson	company			
	RMU	J Location		Unit#2A	-1			
		Site ID	.00MIS-2BFF	P2A-1	•			
	Inp	ut Number 📊	nput1		•			
							Site Setup	
						_		ʻ
Inputs		3		Tabs		1		
<u> </u>	Decrease	Increase	<u>L</u> ast	<u> </u>	ck <u>N</u> (	ext >	Clos	8

3) Click the **Remote Monitoring Unit (RMU)** tab and type the scaling and set point information. In the **Input Label** box, type the label name. This eight-character label is also used for Y-axis labels of charts. In the **Input Type** box, enter information by typing or clicking the input type.

🔇 Input Setup	p - LOOMIS-2BF	P2A-1, Inpu	:1				X
Input Selection	Remote Monitoring Unit (RMU)	Sensor Information	Tank Information	Plot Parameters	Plot Colors		
	Input Status	Ing	out ON		Top of Scale	10,000.00	
	Input Label	Level #1		Во	ttom of Scale	0.00	
	Input Type	CurrentLoop (4-20mA) 👻		Hi A	Hi Alarm Setpoint		
				Low A	larm Setpoint	0.00	
				Outpu	it On Setpoint	10,000.00	
				Outpu	it Off Setpoint	0.00	
				Respons	eTime (m : s)	0 🚍 : 0	<b>-</b>
Inputs <u>F</u> irst	<u>D</u> ecrease	Increase	Last	Tabs	ick <u>N</u> e	ext >	Close

C	) Input Setup - LOOMIS-2BFP2A-1, Input1				×
	Input Selection Monitoring Unit (RMU) Selection	Tank Information	Plot Parameters	Plot Colors	 
		Make	SenoLevel		
		Model	EZ-123		
		S/N	123456789		
		Installed	12/25/97		
		Calibrated	11/12/97		
		Comment	I		
	Inputs	Lot	Tabs	k   Nosta	lose
	<u>First</u> <u>D</u> ecrease <u>I</u> ncrease	<u>L</u> ast	< <u>B</u> ac	k <u>N</u> ext >	

4) Click the **Sensor Information** tab and type information about the sensor attached to the input.

5) Click the **Tank Information** tab and type information about the Tank attached to the input.

😵 Input Setup - LOOMIS-2B	FP2A-1, Input1				×
Remote Input Selection Monitoring Unit (RMU)	Sensor Information	Plot Parameters	Plot Colors		
	Contents	water			
	Units [	gallons			
	Max Level 🗧	10000			
Inputs EirstDecrease	Last	Tabs <u> </u>	k <u>N</u> ext 3	•	Close

6) Choose the **Plot Colors** tab and specify the line color to be used on displayed screen plots for Historical Trending and Real-Time Charting. Line colors are preset for Min/Max/Average charts.

🌖 Input Se	tup - LOOMIS-28	FP2A-1, Input	1				×
Input Select	Remote Monitoring Unit (RMU)	Sensor Information	Tank Information	Plot Parameters	Plot Colors		
		Input Col	or Red		F		
			li .coo				
				Taka			
Inputs <u>F</u> irst	Decrease	Increase	<u>L</u> ast	Tabs Kabs	ck <u>N</u> e	ext >	Close

Automatic Remote Monitor Setup

The **Auto Remote Monitor Setup** command in the **Sites** menu is used to automatically remotely program the remote monitor. The parameters that are programmed are: RMU Name, RMU ID, Input Setup, Data Logging, Real-Time Clock, and Alarm Dial-Out Phone Numbers.

Once you have provided the required information – you may select this command to call the site and automatically program the remote monitor.

### Chapter 4 | On-Demand Real-Time Monitoring and Data Collection

On-demand tasks are initiated by you. You can perform real-time monitoring of a remote site, data log transfer for historical trend analysis, and manual-mode communications with the remote monitor when necessary.

On-Demand Real-Time Monitoring

Monitoring conditions at a remote location in real-time is one of the most often-used features of Poll-Ease Remote Monitoring Software. Whether using a personal computer in your office or a laptop computer while on site, you can monitor multiple channels of data in a scrolling strip chart or tabular format.

#### " To call a site and view the current data:

S

1) On the **Analysis** menu, click **Real-Time** or on the tool bar, click **Real-Time**.

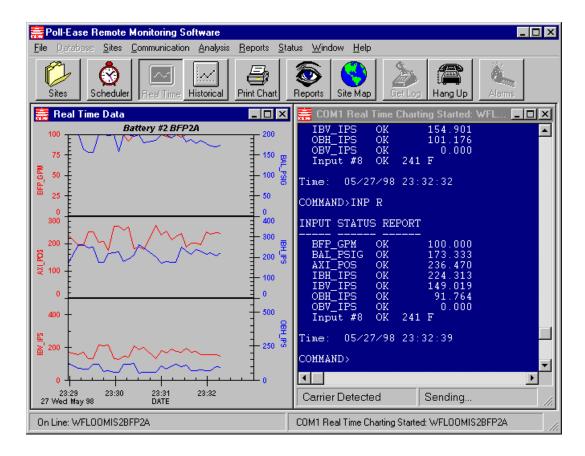
elect Site for Real Tir	ne Monitoring		×
Site Selection ——		1	
<u>S</u> ite ID	BigTank		
Site Information			ОК
Company Name			
RMU Name			Cancel
RMU Location			
RMU Phone #	15		
Last Time Called			
Log Period (m:s)	20 : 0		
Calling Properties —			
From Location	Default Location	•	Configure
Connect Using	Sportster 28800 External	•	Configure

- 2) In the Site Selection group, click the Site ID box to select a site for Real-Time Analysis.
- 3) In the **Site Information** group, edit or add the **RMU Phone** # (if necessary).
- 4) In the Calling Properties group, select your calling location in the From Location box.
- 5) In the **Connect Using** box, select the appropriate modem or communications port.

6) Click **OK** to have the Poll-Ease Remote Monitoring Software automatically call the site and establish a connection.

This process may take up to a minute.

7) When that connection is established, two windows appear– a **Real-Time Chart** and the **Real-Time Communications** window.



**Real-Time Chart** 

On the Real-Time Chart, the data will scroll from left to right.

#### " To zoom in on any area of the Real-Time Chart

- 1) Drag the mouse (left click and hold) diagonally over the real-time chart to form a rectangle over the area to be zoomed.
- 2) When the mouse button is released, the selected area will be magnified:
- 3) To zoom out, click the right mouse button.

Although real-time charting is designed to chart fewer than eight active inputs from an Input Status Report, it assumes that active inputs will start with Input #1 and will not skip inputs. The Real-Time Chart does not plot discrete input types or output states.

#### Real-Time Data

The **Real-Time Communications** window displays the actual data as it is being received from the remote monitor. Note that the reports, labels information, and time stamps in the box are generated by the remote monitor, *not* by Poll-Ease Remote Monitoring Software.

#### **On-Demand Data Log Download**

#### " To call a site and download the data log

1) On the **Communication** menu, click the **Get Remote Data Log** command. or on the tool bar, click **Get Log** 



- 2) In the Site Selection group, click the Site ID box to select a site for Data Log Download.
- 3) In the Site Information group, edit or add the RMU Phone # (if necessary).
- 4) In the Calling Properties group, select your calling location in the From Location box.
- 5) In the Connect Using box, select the appropriate modem or communications port.
- 6) Click **OK** to have the Poll-Ease Remote Monitoring Software call the site and establish a connection.

This function will download the data log from the RMU and store it in the site database. This task generally takes several minutes. The log data was acquired automatically at specific intervals by the RMU.

On-Demand Manual Mode Calling (User Interactive Session)

It is sometimes necessary to bypass the automatic data collection features of the Poll-Ease Remote Monitoring Software and communicate directly with your remote monitor in manual mode.

Refer to the Remote Monitor User's Guide for further information on this mode of operation.

#### " To call a site in manual mode

- 1) On the **Communication** menu, click the **Call Remote Site** command.
- 2) In the **Site Selection** group, click the **Site ID** box to select a site for Data Log Download.
- 3) In the **Site Information** group, edit or add the **RMU Phone** # (if necessary).
- 4) In the Calling Properties group, select your calling location in the From Location box.
- 5) In the **Connect Using** box, select the appropriate modem or communications port.

6) Click **OK** to have the Poll-Ease Remote Monitoring Software automatically call the site and establish a connection.

Manual mode (User Interactive) calls allow you to type commands directly to the remote monitor. This type of call is useful for setting up the remote monitor for your application, acknowledging alarms, etc.

Ending an On-Demand Call

A data log download will complete and end the call after the entire log is transferred. If you need to abort the call prior to completion or would like to end Real-Time Charting or a Manual-Mode call, perform one of the following:

#### " To end an On-Demand Call

1) On the **Communication** menu, click **Hang Up/On-Demand Call Port** or on tool bar, click **Hang Up**.



2) For Real-Time Charting, on the **Analysis** menu, click **End Real-Time** or on the tool bar, click **Real-Time** 

Note: Any communications windows that were open prior to this step will remain visible until manually closed.

## Chapter 5 | Automatic Data Collection

Poll-Ease Remote Monitoring Software can automatically call remote monitors at specified times and frequencies. Each site has its own call schedule. When a site is called, its data log is automatically downloaded and appended to the Poll-Ease Remote Monitoring Software database.

Scheduling Calls and Collecting Data

#### " To specify the calling schedule for each site

- 1) On the **Sites** menu, click **Site Setup** or on the tool bar, click **Sites**.
- 2) In the **Site Setup** dialog box, click the **Call Scheduling** tab and enter **Next Call Date**, **Next Call Time** and **Call Interval** information to set a call schedule for the identified site.
- 3) The Scheduled Calls button must read Enabled for this site to be called automatically. When the Scheduled Calls reads Disabled, click it to change its state. If you wish to exclude a site from being called, click Scheduled Calls to read Disabled.

🌖 Site Setup - BigTank 🛛 🛛 🗙
Site         Remote Information         Call Monitoring Unit (RMU)         Call         Contact Information         Alarm Phone Numbers         Notes
Last Call Date 5/20/98 10:55:59 PM
Next Call Date 05/20/98
Next Call Time 09:48:47 PM
Call Interval 1 🚍 Months 🔽
Scheduled Calls Enabled
Tabs
Eirst Up Down Last Close Close

Automatic Unattended Calling

#### " To start the automatic call feature

- Scheduler
- S On the Communication menu, make sure the Call Scheduler Enabled command is checked ("ü") or the Scheduler toolbar button is depressed.

# ⇒ Automatic remote data collection from each site will only occur when the Scheduler toolbar button is depressed AND the Schedule Calls button in the Call Scheduling tab reads Enabled for each site.

The call interval is based on logging rate and size of data logger. The data logger uses a cyclical buffer, which will overwrite itself without warning. Remote monitors can log about 2000 records before overwrite occurs. You must determine the call interval so that data logs are collected before log records are overwritten. Redundant log records are ignored upon storage into the local database. At a 20-minute logging period (three per hour), remote monitors can log data for about one month before overwrite occurs.

Also see Chapter 4 | On-Demand Real-Time Monitoring and Data Collection

### Chapter 6 | Alarm Handling

An alarm is generated when a monitored condition at a remote location falls outside its preset operating limits, such as when a product inventory level is below its re-order point.

The occurrence of an alarm causes the remote monitor to trigger an alarm mechanism, the nature of which depends on the RMU in use and the way it is configured.

The actions generally start with a pre-alarm, followed by a remote notification sequence. The remote notification process initiates the remote monitor auto-dialer.

If on-site personnel fail to acknowledge an alarm within a predetermined time, a "round-robin" dialing sequence commences. The auto-dialer repeatedly calls numbers on its telephone list – up to eight telephone numbers may be contained on the dial-out list – until someone answers and provides a correct password.

The auto-dialer then reports the alarm and allows the called party an opportunity to acknowledge it. When someone on the call list acknowledges the alarm, dialing will cease. At that point, the responsibility to act is on the called party.

Typically, the remote monitor will be configured to first dial a computer running Poll-Ease Remote Monitoring Software and deliver an alarm message, which is stored and presented to the operator.

The remote monitor will then dial the list of responsible personnel. Poll-Ease Remote Monitoring Software will receive and process incoming alarms *but does not automatically acknowledge the alarms*. Poll-Ease Remote Monitoring Software does, however, permit manual intervention for purposes of alarm acknowledgement.

Upon completion of an incoming alarm report, the "Code" from the calling remote monitor is matched with an RMU ID in the Poll-Ease Remote Monitoring Software database. If no match is found, the **Alarm List** entry will contain the Site Name (if any), input(s) in alarm, input level, and alarm status. Otherwise, if a match is found, the Site ID and alarm set points will be included as well.

Poll-Ease Remote Monitoring Software maintains detailed information concerning the alarms it has processed. This information is contained in the **Alarm List** and **Alarm Log**. Open the **Status** menu and choose the desired command.

#### Alarm Detection

Alarm detection is performed at every logon and logoff, using alarm status information from the remote monitor.

If a new or unacknowledged alarm is detected:

- S An **Input Status** report will be requested. This report will be stored in the Poll-Ease Remote Monitoring Software database.
- § You will be alerted by a beep.
- § An updated **Alarm List** will be displayed.
- § An ASCII text **Alarm Log** will also be created.

#### Automatic Answer Alarm Dial in

#### " To automatically answer alarm dial-in calls

 On the Communications menu, when Auto Answer Alarms is checked, or when the tool bar Alarms button is depressed, it is enabled. Click either to change state.



- 2) The **Auto Answer Communications** window indicates Alarm Auto Answer Enabled. If not, be sure the modem is operating and available.
- 3) Set up a test to cause the remote monitor to dial your modem's phone number when an alarm exists.

## **Þ** See Chapter 3 | Accessing the Site Database for information on Alarm Phone Numbers, Alarm Set Points, and Automatic Remote Programming.

If an alarm dial-in call is detected:

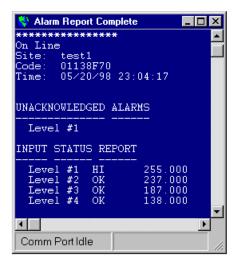
- S An **Input Status Report** will be provided by the remote monitor. This report will be stored in the Poll-Ease Remote Monitoring Software database.
- § You will be alerted by a beep.
- § An updated Alarm List will be displayed.
- § An ASCII text Alarm Log will also be created.

#### Acknowledging Alarms

Poll-Ease Remote Monitoring Software will not automatically acknowledge an alarm.

#### " To manually acknowledge an alarm after an Auto-Answer Alarm Report:

- 1) From within the Auto-Answer Alarm Communications window, press any key within 10 seconds after the alarm report has been displayed in the window.
- 2) Type your eight-digit security code upon request by the remote monitor.
- 3) After the security code has been acknowledged, type "ALM R" and press ENTER to learn the cause of the alarm report. Press "Y" or "N" to acknowledge the alarm.
- 4) You may investigate further by issuing other commands. Conclude the session by typing "**BYE**" and press **ENTER**.
- 5) Minimize or close the Alarm Communications window if you wish.



#### Alarm List

The **Alarm List** dialog box is a recap of all detected alarms. You can manually delete entries from the **Alarm** list at any time.

Accessing the Alarm List

#### " To review the list of detected alarms

- 1) On the **Status** menu, click **Alarm List**.
- 2) Highlight an alarm record and click **Delete** to permanently remove the alarm record.

	Date Time	SiteID	Remote Monitor Name	RMU ID#	Input Label	Value	Status
I	5/20/98 11:04:15 PM	BigTank	test1	01138F70	Level #1	255	H
	5/20/98 11:03:45 PM	BigTank	test1	01138F70	Level #1	255	H
	12/4/97 6:24:15 PM	LOOMIS-2	WFLoomis #1	03788F70	Flow	4.98	HI
	12/4/97 6:18:10 PM	LOOMIS-2	WFLoomis #1	03788F70	Flow	4.98	HI
	12/4/97 6:12:34 PM	LOOMIS-2	WFLoomis #1	03788F70	Flow	4.98	HI
	12/4/97 6:06:59 PM	LOOMIS-2	WFLoomis #1	03788F70	Flow	4.98	H
	12/4/97 6:01:23 PM	LOOMIS-2	WFLoomis #1	03788F70	Flow	4.98	HI
			<u>C</u> lose <u>D</u> el	ete			

## Alarm Log

The **Alarm Log** is an ASCII text record of all alarms, maintaining extensive information of the conditions and alarm status at the remote site.

- " To review alarm activity at your remote site
- § On the Status menu, click Alarm Log.

🗐 Alarm	log - Note	epad		_ 🗆 ×
<u>F</u> ile <u>E</u> di	t <u>S</u> earch	<u>H</u> elp		
ALARM	ALARM	ALARM	ALARM	
	******	***		
On Lin Site:	-			
	01138F	70		
	05/20/		3:31	
UNACKN	DWLEDGE	D ALARM	S	
Leve	l #1			
INPUT :	STATUS	REPORT		
	 L #1 H	 T	255.000	
	1 #2 0		237.000	
Leve	1 #3 0		187.000	
Leve	1 #4 0	К	137.000	
				-
•				

Alarm Dial-In Modem Considerations

Poll-Ease Remote Monitoring Software supports modem sharing between it and another communications application when **Auto Answer** is disabled by "releasing" the communications port when not in use. However, if **Auto Answer** is enabled, the communications port will remain open (unavailable to other applications) and the modem will respond to an alarm dial-in call from the remote monitor. The default dial-in transfer data rate is 2400 bps.

# Chapter 7 | Using the Site Map

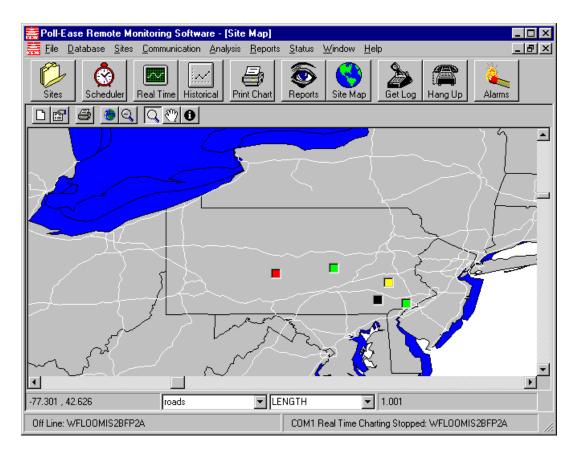
Poll-Ease Remote Monitoring Software provides a very powerful way to view remote conditions at a glance. The Site Map is a world map that allows you to zoom or pan to an area of interest. Any location monitored by an RMU is considered a site. Sites are represented by small, square icons on the Site Map. Color-coded icons are automatically placed according to zip code or longitude and latitude.

## " To show the Site Map

• On the **Reports** menu, click **Show Site Map** or on the toolbar, click **Site Map** button.



Positioning the mouse cursor over a site will identify it in the status bar of the Site Map. Double-click a site icon to initiate a call to the site.



Site Map Icons

Each site is represented by an icon on the map. The color of the icon indicates the last known alarm status.

- § Green is normal, no alarms exist.
- § Red is new alarm, this site requires attention.
- S Yellow is acknowledged alarm. This indicates that an alarm currently exists, but has been acknowledged.
- § Black is unknown alarm status. This is the state of a new site before it has been called.

# Site Icon Placement

All sites located in the United States are placed on the map automatically using site zip code and the geo-coding feature of the software.

# " To change site location information

1) On the **Sites** menu, click **Site Setup** or, on the tool bar, click **Sites**.



2) Click the Site Address tab and type the zip code or longitude and latitude of the site. Site icon placement on the map will be automatically "geo-coded" according to zip code if located in the United States and Longitude and Latitude fields are blank.

# " To move a site icon location manually

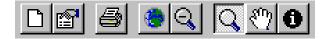
- With the mouse pointer over the site icon, press the **CTRL** key while dragging the mouse pointer to the new location. To drag, hold left mouse button down while moving mouse. The mouse must be moved at least outside the icon to re-locate the icon's position. Zoom in on the map to locate icon more precisely.
- If a remote site is outside the USA, enter an approximate **Longitude** and **Latitude** (e.g. -90 and 25, respectively, for the Gulf of Mexico), then re-locate the icon on the site map by holding the **CTRL** key while dragging the mouse pointer to the new location.

# Map Layers

The Site Map consists of a collection of geo-graphic shape data known as "Layers". The default map layers are World countries, USA states/counties/roads, Mexico states, and Canada provinces. You have the option to add, delete, or modify these map layers according to your needs. For example, you may want to add US cities and color them white.

## Map Functions

The Mapping Functions include (left to right on toolbar) New Layer, Layer Properties, Print Map, Full Zoom Out, 2x Zoom Out, Zoom In, Pan, and Information:



- S New Layer map layers are located in a folder named "\MapData" below the main program folder. Select one or more additional layers such as counties, roads, and cities. Selected layers will be restored when program is restarted.
- S Layer Properties opens the Layer Properties dialog box to change or delete a map layer. Layer color and order may be modified and will be restored upon program restart. To change color, click on the **Color** box and select a new color from the color dialog. To change layer order, click the **Up** or **Down** arrow buttons. To delete a layer, click the "X" button. To change the map background color, click **Background**.

🖏 Ma	o Properties		? ×
	Layers		
	states Roads		
	province states cntry94		
	ОК	Cancel	Background

- § Print prints the map to the currently selected printer.
- § Zoom Out returns to the fullest extent (world map).
- § Zoom Out 2x each time this or right mouse button is clicked, the map zooms out two times.
- § Zoom In when this button is depressed, you can zoom in on a specific area of the map by holding the left mouse button down and dragging over the area of interest.
- § Pan when this button is depressed, click and drag entire map to center on the area of interest.
- S Information click on map for details on currently selected layer. You may change the selected layer and/or which information to display by using the drop-down lists in the Map Status Bar, described below.

Map Status Bar

-76.677 , 40.359	states	STATE_NAME	WFLOOMIS2BFP2A - Alarm
10.011 / 10.000			

The Site Map status bar indicates current longitude and latitude of the mouse pointer position in the left-most panel, and allows you to select which layer of information is displayed as the mouse pointer is moved over and clicked on the map. Select the layer name and information type from the drop-down list boxes. The Site ID and its alarm condition are also indicated as the mouse is moved over a site icon in the right-most panel.

# Chapter 8 | Producing Reports

Poll-Ease Remote Monitoring Software allows you to analyze remote site conditions to assist plant operations, maintenance, and other key personnel in making decisions without anyone being at the site.

While the data that serves as the foundation for this report is automatically gathered from the remote site and processed on the local computer, you are required to specify date ranges, chart parameters, and other site-specific operating conditions to produce accurate, reliable results.

**On-Demand Reports and Charts** 

Tank Level Reports

- § Historical Level (Selected Site)
- § Current Levels (All Sites)
- § Current Alarms (All Sites)

Data Analysis Charts

- § Min/Max/Average
- § Historical Trend
- § Real-Time

Viewing or Printing Reports

# " To view or print a single report page:

- 1) On the **Reports** menu, click **View Report** or click tool bar **Reports**.
- 2) Under Site Selection in the Site ID box, click the arrow to select a site.
- 3) The Company Name, RMU Location, and RMU Name corresponding to site will appear.
- 4) From the group of **Report** buttons, click the one you want to view.



😫 Select R	🜖 Select Report Page to Vie <del>w</del> 🛛 🗙					
_Site Sele	ction ——					
Compa	ny Name					
RMU	Location					
RM	lU Name	test1				
	<u>S</u> ite ID	BigTank	•			
		<u>H</u> istorical Level				
	<u>c</u>	current Levels (All Sites)				
		<u>A</u> larm Status (All Sites)				
		Close				

# Tank Level Report Example

			e dhe emote	Possibilit	ที่อร		
		Tank Level					
Date/Time	SiteID	Remote Monitoring Unit Name	Inout #	Contents	Reading	Available Canacity	Units
5/11/97 11:15:30PM	BACONTNPRT2/BFP	Bacon Big Tank	1	water1	0.00	100.00	
5/11/97 11:15:30PM	BACONTNPRT2/BFP	Bacon Big Tank	2	water2	31.37	168.63	
5/11/97 11:15:30PM	BACONTNPRT2/BFP	Bacon Big Tank	з	water3	94.12	205.88	
5/11/97 11:15:30PM	BACONTNPRT2/BFP	Bacon Big Tank	4	water4	188.24	211.76	
5/11/97 11:15:30PM	BACONTNPRT2/BFP	Bacon Big Tank	5	water5	313.73	186.27	
5/11/97 11:15:30PM	BACONTNPRT2/BFP	Bacon Big Tank	6	water6	470.59	129.41	
5/11/97 11:15:30PM	BACONTNPRT2/BFP	Bacon Big Tank	7	water7	658.82	41.18	
5/11/97 11:15:30PM	BACONTNPRT2/BFP	Bacon Big Tank	8	water8	800.008	-1.00	
6/7/97 11:57:00PM	LOOMIS-28FP2A-1		1		0.80	-1.00	
6/7/97 11:57:00PM	LOOMIS-28FP2A-1		2		0.23	-1.00	
6/7/97 11:57:00PM	LOOMIS-28FP2A-1		з		0.23	-1.00	
6/7/97 11:57:00PM	LOOMIS-28FP2A-1		4		0.22	-1.00	
	LOOMIS-28FP2A-1		5		0.21	-1.00	

# Tank Alarm Report Example

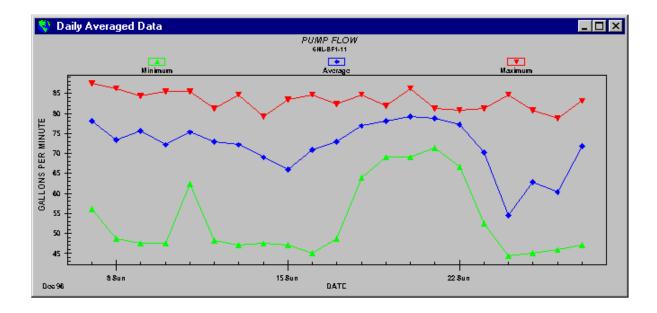
	s #* emote Possi	bilities		
Tank Alarm St 5/28	-			
Date/Time SiteID Remote Monitorin a Unit Name	RMU ID#	Input Label	input Level	Alarm Status
12/30/97 3:51:38PM WFLOOMIS28FP2A	04618F70	PMP-OBV	0.40	н
12/30/97 3:50:48PM WFLOOMIS2BFP2A	04618F70	PMP-OBV	0.40	н
12/30/97 3:48:51PM WFLOOMIS2BFP2A	04618F70	PMP-OBV	0.41	н
12/30/97 3:13:43PM WFLOOMIS2BFP2A	04618F70	PMP-OBV	0.41	н
12/30/97 3:12:55PM WFLOOMIS28FP2A	04618F70	PMP-OBV	0.41	н
12/30/97 3:02:31PM WFLOOMIS28FP2A	04618F70	PMP-OBV	0.42	н
12/30/97 3:01:43PM WFLOOMIS28FP2A	04618F70	PMP-OBV	0.41	н
12/4/97 8:24:15PM LOOMIS-28FP2A-1 WFLoomis #1	03788F70	Flow	4.98	н
12/4/97 6:18:10PM LOOMIS-28FP2A-1 WFLoomis #1	03788F70	Flow	4.98	н
12/4/97 6:12:34PM LOOMIS-28FP2A-1 WFLoomis #1	03788F70	Flow	4.98	н
12/4/97 0:00:59PM LOOMIS-28FP2A-1 WFLoomis #1	03788F70	Flow	4.98	н
12/4/97 6:01:23PM LOOMIS-2BFP2A-1 WFLoomis #1	03788F70	Flow	4.98	н

Data Analysis Charts

Min/Max/Average Data Chart

# " To select a site for a Min/Max/Average Data Charts

- 1) On the Analysis menu, click Min/Max/Average.
- 2) Under Site Selection in the Site ID box, click the arrow to select a site.
- 3) The Company Name, RMU Name, RMU Location, Last Time Called, and Log Period corresponding to that site will appear.
- 4) Under **Date Range**, in the **Begin Date**, **End Date**, **Begin Time**, **and End Time** boxes, use the arrows to set the date range desired.
- 5) Press OK.



# " To print a Min/Max/Average Data Plot

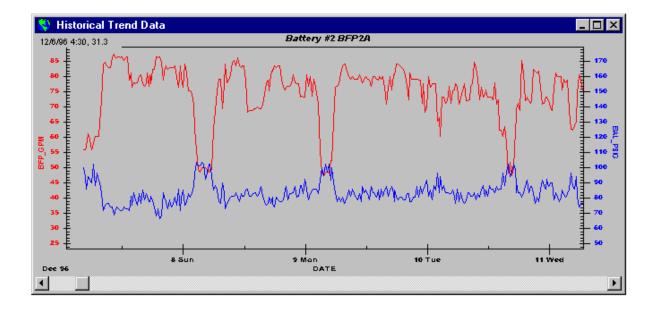
S With the **Min/Max/Average** plot displayed on the screen and selected, click the **Analysis** menu, and then click **Print Chart**.

Historical Trend Data Chart

- " To select a site for a Historical Trend Data Chart
- 1) On the **Analysis** menu, click **Historical Trend** or click tool bar **Historical**.
- 2) Under Site Selection in the Site ID box, click the arrow to select a site.
- 3) The Company Name, RMU Name, RMU Location, RMU Phone Number, Last Time Called, and Log Period corresponding to that site will appear.
- 4) Under **Date Range, in the Begin Date, End Date, Begin Time,** and **End Time** boxes, use the arrows to set the date range desired.
- 5) Press OK.



Print Chart



# " To print a Historical Trend Data Chart

S With the **Historical Trend** chart displayed on the screen, click the Analysis menu, and then click **Print Chart**.



Data Plot Setup

**Plot Parameters** 

The **Plot Parameters** dialog box enables you to specify titles, axis labels, and axis scaling for Min/Max/Average Data Charts.

# " To enter Plot Parameters

1) On the Sites menu, click Report Setup and then Plot Parameters.

🔇 Input Setup - WFLOOMIS2BFP2	A, Input1		×
Remote Input Selection Monitoring Unit (RMU)		ot neters Plot Colors	
Main Title	PUMP FLOW		
Sub Title	6HL-BF1-11		
Y Axis Label	GALLONS PER MINUTE		
Y Axis Min	0 YA	xis Max 100	
X Axis Label	DATE		
		Tabs	
<u> </u>	crease Last		ext > Close

- 2) If you wish to change the selected site, click the **Input Selection** tab. In the **Site ID** box, click the arrow to make your Site ID selection. In the **Input Number** box, select the desired input.
- 3) In the **Main Title** box, type the title for the report plot.
- 4) In the **Sub Title** box, type the subtitle for the report plot.
- 5) In the **Y-Axis Label** box, type the appropriate information.
- 6) In the Y-Axis Min and Y-Axis Max boxes, type the appropriate information.
- 7) In the X-Axis Label box, type the appropriate information.
- 8) Click Increase or Decrease to change selected input.
- 9) Press Close when finished.

# Chapter 9 | Command Reference

This chapter describes the Poll-Ease Remote Monitoring Software menu commands. Please read this chapter thoroughly to familiarize yourself with the menu commands.

#### File Menu

The file menu contains a set of commands that are used for creating and opening documents in notepad, and selecting printer setup.

## New

This command creates a new document in Notepad. This command will cause the Windows **Notepad** editor program to appear.

#### Open

This command opens an existing document in Notepad. Invoking this command will cause the **Open File** dialog box for the Windows Notepad editor program to appear.

## Print Setup

This command selects the default printer and printer properties. Invoking this command will cause the **Print Setup** dialog box to appear.

P	int Setup			? ×
	Printer			
	<u>N</u> ame:	HP LaserJet 4M	<b>•</b>	<u>P</u> roperties
	Status: Type:	Default printer; Ready HP LaserJet 4M		
	Where: Comment:	\\Dancer_server_001\hp_laser_4		
	Paper		- Orientation	
	Size:	Letter 8 1/2 x 11 in	A	Portrait
	<u>S</u> ource:	Auto Select	<b>Z</b>	C L <u>a</u> ndscape
			OK	Cancel

Exit

This command exits the program.

# Database Menu

These commands are used to create, open, save as, import, and perform maintenance on the database.

New

This command creates a new database.

Open

This command opens a local database. Invoking this command will cause the **Select Database File** dialog box to appear.

Select Datab	ase File			? ×
Look jn:	Careford Pollease32	•	£	
🦲 Backup				
logs				
📃 MapData				
pereports.r				
Pollease.m				
USAZips.n	ID			
, File <u>n</u> ame:	pollease.mdb			( <u>O</u> pen
Files of <u>type</u> :	MS Access Database (*.mdb)		-	Cancel
				<u>H</u> elp

Save As

This command saves a database file under another name. Invoking this command will cause the **Save** dialog box to appear.

## **Open** External

This command selects an "external" database for retrieving site information or data. Invoking this command causes the **Select External Database File** dialog box to appear. The external database could reside locally or on a remote computer accessed through a local or dial-up network

### Import Information

This command allows you to select a site ID from which to get site information from an external database. You must first specify a valid external database.

## Import Data

This command allows you to select a site ID from which to get input signal data from an external database. You must first specify a valid external database.

## Import Data Log File

This command allows you to select a site ID from which to import a data log file previously downloaded from another source. This is useful in cases where logged data was previously collected by other means or for some reason was impossible to get and store the log at the time.

## Maintenance

These commands perform various database maintenance tasks.

#### Automatic

This command performs database maintenance tasks – Repair, Compact, and Backup – described below.

🜎 Database Maintenance			×
This Automatic Database Ta take a while	ask will Repair, Con e. Do you wish to co		I
Start	Stop	<u>C</u> lose	

## Repair

This command checks the integrity of the database and performs repairs if necessary. This task may take a few minutes.

#### Compact

This command copies the current database file to a backup directory, reorders the table indices and eliminates fragmentation, reduces the database size and increases access speed. This task may take a few minutes.

## Back Up

This command initiates a backup of a database file from the backup directory created prior to compaction. Work is allowed to continue while backup is in progress. Invoking this command will cause the **Microsoft Backup** utility dialog box to appear. This task may take a few minutes.

## Data Reduction

This command deletes data records in order to reduce apparent log rates to the specified rate. After selecting the site on which to perform data reduction, the following dialog box will appear, asking if you wish to proceed.

Poll-Ease	e Remote Monitoring Software 🛛 🛛 🔀
?	1538 data records exist for WFLOOMIS2BFP2A from 12/6/96 10:59:57 PM to 5/29/98 11:48:00 PM. All data within the date range will be permanently deleted. Do you wish to continue?
	Yes No

## Delete Specified Data Points

This command deletes data points within a time and date range for a specified site. This task may take a few minutes.

Delete All Data Points

This command deletes all data points for a specified site. This task may take a few minutes.

## Rebuild Min/Max/Ave Tables

This command performs recalculation of minimum/maximum/average tables. This task may take a few minutes.

## Update Database

This command performs updates to database table structures as a result of program upgrades.

## Sites Menu

The **Sites** menu contains a set of commands used to enter site information and input configuration. Automatic setup of a remote data monitor is also performed from this menu.

## Site Setup

This command adds, edits, or deletes sites in the site database. This command displays the **Site Information** dialog box.

# Input Setup

This command is used to edit input names, parameters, and plot selections for reporting. This command displays the **Input Configuration** dialog box.

## Auto Remote Monitor Setup

This command selects a site for automatic remote setup. The parameters from the **Input Setup** dialog are automatically programmed into the selected remote monitor.

# Report Setup

**Plot Parameters** 

This command displays the Plot Parameters dialog box.

# Communication Menu

This menu contains commands to enable/disable the call scheduler, show/hide the communications windows, call a remote site, auto answer alarms, configure the modem, and perform dial-up networking.

### Call Remote Site

This command calls a site, logs on, and allows you to communicate directly with the remote monitor.

## Get Remote Data Log

This command gets the data log from a remote site and stores it in the database.

## Hang Up

This menu contains commands to terminate modem communications sessions and hang up selected modems.

# All Ports

This command terminates all active communications sessions and hangs up all modems.

## **On-Demand Call Port**

This command terminates an active communications session and hangs up the on-demand dial out modem.

#### Auto Alarm Answer Port

This command terminates an active communications session and hangs up the auto-answer alarm dial in modem.

#### Auto Answer Alarms

This command enables/disables the auto-answer alarm dial in and logging feature.

### Show Comm Windows

This command makes the communication windows visible or invisible.

## Properties

This command displays a communications properties dialog box.

#### Use Telephony Services

This command enables/disables use of Windows Telephony Services.

### **Dial-up** Networking

Dial-up networking is a feature of the Windows operating system, which permits your Poll-Ease Remote Monitoring Software to access *via telephone* the database of a second computer running Poll-Ease Remote Monitoring Software. A thorough understandings of Microsoft's Dial-up Networking feature (and its limitations) is needed to configure and use this capability.

#### Analysis Menu

This menu contains commands to display real-time charts, min/max/average charts, and historical trend charts.

## Real-Time

This command calls and gets real-time data for a selected site for all eight sensor inputs and displays them on one graph.

#### Min/Max/Average

This command calls and gets minimum, maximum, and average data from the database for a selected site. This command will cause the **Select Site for...** dialog box to appear. Select a site and date range to display min/max/ave data from all active inputs each on a separate graph.

## Historical Trend

This command will get historical data from the database for a selected site. Invoking this command will cause the **Select Site for...** dialog box to appear. Select a site and date range to display historical data from all inputs on a graph.

#### Print Chart

Prints currently selected chart.

## Zoom Out Chart

Select this command or right click mouse over the graph to restore original view.

## Reports Menu

This menu contains commands to print or view reports and display Site Map.

## View Report

This command displays reports that can be printed or sent to others by email using the appropriate toolbar buttons at the top of the window.

#### Show Site Map

This command displays the Site Map that provides an easy way to quickly analyze current remote site status conditions.

#### Status Menu

This menu contains commands to show the alarm list, alarm log, and the activity log.

#### Alarm List

This command displays the Alarm List dialog box.

## Alarm Log

This command displays the Alarm Dial In log in Notepad.

#### Activity Log

This command displays the program Activity log in Notepad.

Poll-Ease Remote Monitoring Software maintains a detailed activity log named "activity.log". The activity log contains program information, as well as operational status messages. It is self-explanatory and is very useful for maintaining records or for troubleshooting various types of problems. This file will continue to grow and should be saved and deleted periodically.

#### Disk Drive

This command displays the following information about the hard drive – total byte capacity, bytes used, bytes free, and percent-full information on hard disk.

Hard Disk Drive Status for C:\	
Total Space (MB)	1276
Used Space (MB)	1202
Free Space (MB)	74
Percent Full	94%
ОК	

# Window Menu

This menu contains commands to organize and access open windows.

## Cascade

This command arranges all windows in a stepped order.

#### Tile Horizontally

This command arranges all windows more wide than tall.

#### Tile Vertically

This command arranges all windows more tall than wide.

## Minimize All

This command minimizes - to icons - all visible windows.

#### Arrange Icons

This command evenly spaces minimized windows in an orderly way.

# Close All

This command hides all visible windows.

#### (Window List)

This last section of the **Window** menu is a list of all currently open windows. Click a window name to place it into view and move focus to it. The window list indicates the currently selected window by a check mark before its name.

#### Help Menu

#### Help Topics

This command displays on-line help.

## About

This command displays the software version and other information about the Poll-Ease Remote Monitoring Software.

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