LUDLUM MODEL 375 LOGGER SOFTWARE

May 2015 Version 3.0.0



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1.0 Introduction

The Ludlum Model 375 Logger Software displays readings from a Model 375 or Model 375P in real time and logs data to an Access database file. The software will indicate if the reading is a HIGH ALARM (red), DET FAIL (red), LOW ALARM (orange), or a NORMAL (green). There are separate displays for the current reading and the last logged reading. Readings can be saved at any interval from every 2 seconds to every 3600 seconds (1 hour). There are two logging intervals. One for normal operation and another for when the instrument has a high alarm or failure.

The data is saved in both a Microsoft Access 2000 database and in two text files. The database filename is data.mdb and the text filenames are data.txt and alarms.txt. The data.txt file save the same information as the data.mdb file while the alarms.txt file only saves records during an alarm or failure. The data that is logged is:

- Date/Time
- Status
- Reading
- Unit of measurement
- User-defined note

2.0 Installation

Install the software by running the Model_375_Logger-3.0.0.exe file. The default location is: C:\Program Files\Ludlum Measurements, Inc\Model 375 Logger.

When the software is run for the first time the database will be stored in the Documents\Model 375 Logger folder for the current user. The location of the database and text files can be changed.

3.0 RS-232 Serial Cable

The Model 375 is connected to the computer via an RS-232 cable (LMI Part #: 8303-608). This is a special cable and it is not possible to use a standard serial cable. For computers that do not have an available RS-232 Serial port, a USB to Serial adapter can be purchased from LMI. The part number is: 2312758.

3.1 Cable Wiring

To make a cable, wire the cable according to the table below:

Model 375	PC (9-Pin)
Pin 4 (TXD)	Pin 2 (RXD)
Pin 2 (GND)	Pin 5 (GND)

4.0 Main Screen

Units uR/hr Note Model 375		-	Dat	Current e 5/15/2015 4:16:14	Last Lo 4 PM 5/1	ogged 5/2015 4:15:22 PM
ata Location C:\Users\pbr	and\My Documents\Mo	del 375 Logger	Readin			5.2 uR/hr
Normal Log Interval gh Alarm/Fail Log Interval	60 - seconds	Email Sa	Statu	-)		Normal
ecords						
TIMESTAMP	STATUS	READING		NOTE		
5/15/2015 4:10:54 PM				Model 375		
5/15/2015 4:11:54 PM	Normal	4.0	uR/hr	Model 375		
5/15/2015 4:12:06 PM	High Alarm	2.8	uR/hr	Model 375		
5/15/2015 4:12:22 PM	High Alarm	5.2	uR/hr	Model 375		
5/15/2015 4:12:38 PM	High Alarm	4.8	uR/hr	Model 375		
5/15/2015 4:12:54 PM	High Alarm			Model 375		
5/15/2015 4:13:10 PM	High Alarm			Model 375		
5/15/2015 4:13:22 PM			uR/hr	Model 375		
5/15/2015 4:14:22 PM				Model 375		
5/15/2015 4:15:22 PM	Normal	5.2	uR/hr	Model 375		1

The main screen is divided into three sections: Settings, Reading, and Records. Settings is used to configure how the software will operate, such as how often the data is logged and where. The Reading section shows the current reading, status, date/time of the last message and of the last logged message. The Records section shows the logged or saved records in a grid or graph.

4.1 Settings

Units – Sets the unit of measure for the model 375. The choices are:

- uR/hr
- mR/hr
- mR/hr
- R/hr
- uSv/hr
- mSv/hr
- Sv/hr

- urem/hr
- mrem/hr
- rem/hr
- cps
- kcps
- cpm

Note – The note is a user-defined comment that is saved with each record.

Data Location – The data.mdb, data.txt, and alarms.txt files are stored here. When changed a new database is created unless one already exists.

Normal Log Interval – Sets how often the data is logged when the area monitor is operating normally. This can be from two seconds to 3600 seconds. This value is set in multiples of two because the model 375 outputs data every two seconds. A low alarm uses this interval.

High Alarm/Fail Log Interval – Sets how often the data is logged when a high alarm or failure occurs. Two separate intervals allow more data to be collected when an alarm happens and keeps the database smaller. For a model 375P both the sigma alarm and sum alarm are considered a high alarm.

COM Port – Specify the COM (RS232) port used to communicate with the 375. The software will prompt for the COM port the first time it is opened.

4.1 E-mail

The logger software can send an email when the area monitor has a alarm or failure to alert the user that the system needs attention.

Image: Subject Model 375 Logger Message 1 This is a user defined message Message2
Message 1 This is a user defined message
- /
Message2 This is another user defined message
Address 1 pbrand@ludlums.com
Address 2
Address 3
From Address pbrand@ludlums.com
Server Address Port Number mail.ludlums.com 25
Test e-mail Save Cancel

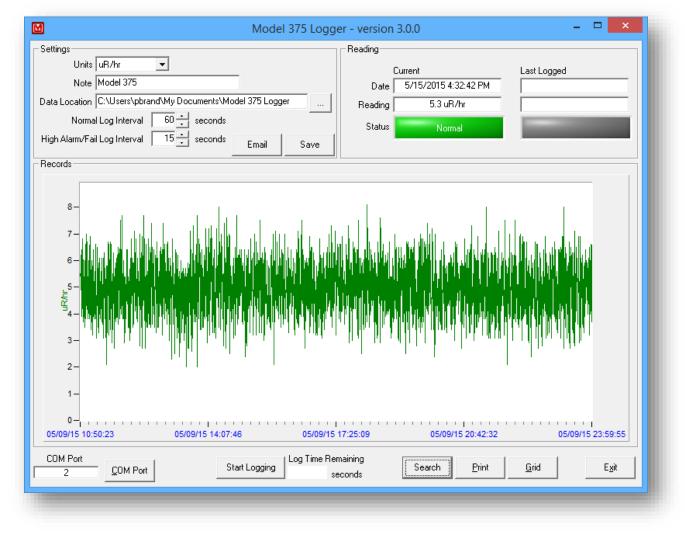
The E-mail settings screen is where the subject, user-defined messages, addresses, and server information can be set. The Test button will take the current settings and attempt to send a test message.

4.2 Reading

The Reading section shows the current and last logged readings to provide a quick look at the current and last logged values. The area monitor sends a message every two seconds which is displayed in the Current column. The last logged message is also displayed so it's not necessary to scroll to the bottom of the grid.

4.3 Grid/Graph

The logged data is shown as either a grid of as a graph. The print button will print the records as a graph or grid depending on which is being displayed.



4.4 Search

Use the Search button to look for past logged records. Records can be search for a specific date and time range and also for a specific status. Records can be filtered by low alarm, high alarm, detector fail, or high/fail.

🔟 Enter search criteria 📕	<
Start Date End Date ፪ /15/2015 ▼	
12:00:00 AM 🗧 11:59:59 PM 🛟	
Status All	
Search Cancel	1