

# GUARD1 /plus

## PIPE Utility User's Manual

Version 2.0

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**PIPE Utility  
User's Manual  
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# PIPE Utility Overview

PIPE Utility allows you to view information about THE PIPE and PIPE II. It supports the following PIPE features:

Feature	THE PIPE	PIPE II
Display PIPE Serial Number	✓	✓
Display PIPE Manufacturing Date (UTC)	✓	✓
Display PIPE Battery Status	✗	✓
Display PIPE Time (Local)	✓	✓
View PIPE II History Data	✗	✓
Save PIPE II History Data to a file	✗	✓
Enable/Disable Beeper	✗	✓
Enable/Disable Tour Reminder Beep	✗	✓

## How to tell which PIPE model you have

- The PIPE serial number, a 6-character code engraved on the PIPE's read tip, will confirm the PIPE model:
  - If the serial number begins with a number (such as 4, 5, 6 or 7) it's a **PIPE**. For example: **56A357**
  - If the serial number begins with the letter "A", it's a **PIPE II**. For example: **A15378**
- In some cases, usually on older PIPES, the serial number is not visible due to wear and tear. In this case, follow the steps in **How to view the PIPE's status** below to determine the serial number.
  - **Note:** if the PIPE is non-functional, PIPE Utility may not be able to display any status information. In this case the message **Communication with the PIPE failed** will be displayed in the PIPE Information section. If this occurs contact Technical Support to request a Return Merchandise Authorization (RMA) for the PIPE.

# Installing PIPE Utility

The workstation must meet the following minimum requirements:

- **Supported Operating Systems:**
  - Windows XP SP3 or later (32-bit only)
  - Windows Vista SP1 or later (32- or 64-bit)
  - Windows Server 2003 SP2 or later (32-bit only)
  - Windows 7 (32- or 64-bit)
  - Windows Server 2008 SP2 or later (32- or 64-bit)
  - Windows Server 2008 R2
- **Required GUARD1 PLUS Program:**
  - GUARD1 PLUS version 2.60 or later
  - Attendant SE version 4.20 or later
- **1024 x 768 or higher screen resolution**
- **A connected Direct Downloader or USB Downloader**

To install PIPE Utility:

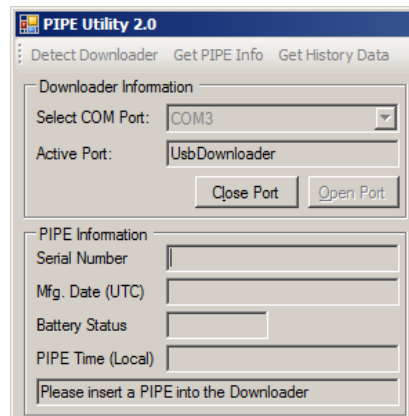
1. Place the PIPE Utility CD in the drive - the installer should begin automatically.
  - If the installer does not begin automatically, open **My Computer** and browse to the CD drive. **Double-click** the **setup.exe** file to start the installer.
2. The installer checks to see whether Microsoft .NET Framework 3.5 SP1 is installed on your system. If it is not installed, a Prerequisite window will appear. Click **Install** to install .NET Framework 3.5, then follow the prompts.
3. Click **Next** at the Welcome screen.
4. Click **Yes** at the License Agreement.
5. To start copying the files, click **Next**.
6. After the installation is complete **you must restart the computer** before you can use PIPE Utility.
7. Select **Yes** to restart the computer now or **No** to restart the computer later.
8. Click **Finish**.

# Using PIPE Utility

## Opening PIPE Utility

1. Confirm that a **Direct Downloader** or **USB Downloader** is connected to the computer running PIPE Utility.
2. If any of these programs are running on this workstation, **close** them:
  - Attendant
  - Attendant SE
3. **Double-click** the **PIPE Utility shortcut** on the Desktop. If the shortcut is not present, click **Start > Programs (or All Programs) > TimeKeeping Systems > PIPE Utility**.

4. PIPE Utility will automatically detect and connect to the Downloader. A successful connection is indicated by:
  - The **Active Port** field displays the Downloader type
  - The **Close Port** button is enabled
  - If no PIPE is inserted in the Downloader, the PIPE Information section's message field displays **Please insert a PIPE into the Downloader**. If a PIPE is present in the Downloader, the PIPE's information will be displayed.



- If the Attendant is running, the Active Port field will display **Attendant is running**. Close the Attendant then click Detect Downloader to search again.
- If the port is still not opened, use the **Select COM Port** drop-down to select the **COM Port** the Downloader is using then click **Open Port**.
  - If successful, the **Active Port** field displays the Downloader type, the **Close Port** button is enabled, and the PIPE Information section's message field displays **Please insert a PIPE into the Downloader** (if no PIPE is present) OR the PIPE Information is displayed (if a PIPE is present).
  - If the port still does not open please contact Technical Support.

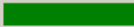
## Viewing the PIPE's status

1. Place a PIPE or PIPE II in the Downloader.
2. The Utility displays the PIPE's information:

- For THE PIPE:

PIPE Information	
Serial Number	40DECF (PIPE I)
Mfg. Date (UTC)	4/20/2001 15:03:53
Battery Status	Not Available f
PIPE Time (Local)	11/24/2010 13:17:33
Reminders not supported by this version of firmware.	

- For PIPE II:

PIPE Information	
Serial Number	A10532 (PIPE II) (L)
Mfg. Date (UTC)	5/14/2010 13:17:46
Battery Status	3.23 Volts 
PIPE Time (Local)	11/24/2010 13:18:35
5 & 10 Min. reminders not supported by this firmware v	

- For PIPE II: if the battery status is **red**, request a Return Merchandise Authorization (RMA) for the PIPE on the Web at [www.guard1.com](http://www.guard1.com) or contact Technical Support via email or phone.

## Viewing PIPE II History Data

PIPE II features an onboard Event Log that can be viewed with PIPE Utility.

### To view PIPE II History Data:

1. On the Menu Bar, click **Get History Data**.
2. The History Data is displayed in the right-hand window panes:
  - The **upper pane** displays the 24 most critical events that have occurred since the PIPE was last initialized.
  - The **lower pane** displays the most recent 4096 events in chronological order with the most recent at the top.

#	Timestamp	Event Type	Value	Units	Critical Event Description
0	11/22/2010 16:00:37	Mechanical Impact	1.877	Volt	The PIPE received a high shock impact of 1.877 Volts.
24	05/18/2010 10:11:35	Over Voltage	8.813	Volt	The PIPE received high voltage of 8.813 Volts.
25	05/14/2010 13:19:34	Over Voltage	8.432	Volt	The PIPE received high voltage of 8.432 Volts.
48	05/18/2010 10:11:41	Under Voltage	8.480	Volt	The PIPE received low voltage of 8.480 Volts.
49	05/14/2010 13:19:38	Under Voltage	8.421	Volt	The PIPE received low voltage of 8.421 Volts.
72	11/24/2010 12:50:34	Tip Shorted	44	Second	The tip was short circuited for 44 seconds.
73	11/24/2010 12:51:24	Tip Shorted	24	Second	The tip was short circuited for 24 seconds.
74	05/14/2010 13:20:58	Tip Shorted	12	Second	The tip was short circuited for 12 seconds.
75	11/24/2010 12:44:34	Tip Shorted	8	Second	The tip was short circuited for 8 seconds.
76	05/18/2010 10:11:16	Tip Shorted	6	Second	The tip was short circuited for 6 seconds.
77	05/14/2010 13:21:04	Tip Shorted	6	Second	The tip was short circuited for 6 seconds.

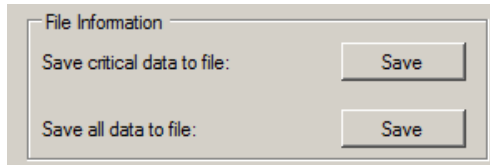
  

#	Timestamp	Event Type	Value	Units	Events Description
1217	11/24/2010 12:51:24	Tip Shorted	24	Second	The tip was short circuited for 24 seconds.
1216	11/24/2010 12:50:34	Tip Shorted	44	Second	The tip was short circuited for 44 seconds.
1215	11/24/2010 12:44:34	Tip Shorted	8	Second	The tip was short circuited for 8 seconds.
1214	11/24/2010 12:42:14	Time Change	11/24/2010...	Time	Internal PIPE time changed.
1213	11/24/2010 11:02:34	Option Bits Changed	7A0000790...	OptionBits	The option settings in the PIPE were changed.
1212	11/24/2010 11:02:34	Read Buffer Cleared	0	Hexadecima...	The read buffer in the PIPE was cleared.
1209	11/23/2010 15:59:45	Time Change	11/23/2010...	Time	Internal PIPE time changed.
1210	11/23/2010 15:59:45	Time Change	11/23/2010...	Time	Internal PIPE time changed.
1208	11/23/2010 14:58:52	Time Change	11/23/2010...	Time	Internal PIPE time changed.
1207	11/23/2010 14:38:52	Time Change	11/23/2010...	Time	Internal PIPE time changed.
1211	11/23/2010 13:59:45	Time Change	11/23/2010...	Time	Internal PIPE time changed.
1173	11/23/2010 13:18:54	Read Buffer Cleared	0	Hexadecima...	The read buffer in the PIPE was cleared.
1206	11/23/2010 12:48:41	Time Change	11/23/2010...	Time	Internal PIPE time changed.
1205	11/23/2010 12:48:39	Read Buffer Cleared	0	Hexadecima...	The read buffer in the PIPE was cleared.
1204	11/23/2010 12:46:08	Time Change	11/23/2010...	Time	Internal PIPE time changed.
1203	11/23/2010 12:46:07	Read Buffer Cleared	0	Hexadecima...	The read buffer in the PIPE was cleared.
1202	11/23/2010 12:45:59	Time Change	11/23/2010...	Time	Internal PIPE time changed.
1201	11/23/2010 12:45:58	Read Buffer Cleared	0	Hexadecima...	The read buffer in the PIPE was cleared.
1200	11/23/2010 12:44:23	Time Change	11/23/2010...	Time	Internal PIPE time changed.
1199	11/23/2010 12:44:21	Read Buffer Cleared	0	Hexadecima...	The read buffer in the PIPE was cleared.
1198	11/23/2010 12:44:21	Read Buffer Cleared	0	Hexadecima...	The read buffer in the PIPE was cleared.
1197	11/23/2010 12:44:06	Time Change	11/23/2010...	Time	Internal PIPE time changed.
1196	11/23/2010 12:44:05	Read Buffer Cleared	0	Hexadecima...	The read buffer in the PIPE was cleared.
1195	11/23/2010 12:43:07	Time Change	11/23/2010...	Time	Internal PIPE time changed.
1194	11/23/2010 12:43:05	Read Buffer Cleared	0	Hexadecima...	The read buffer in the PIPE was cleared.
1193	11/23/2010 12:42:50	Read Buffer Cleared	0	Hexadecima...	The read buffer in the PIPE was cleared.



## Saving the PIPE II's History Data to a text file

You can save the PIPE II's History Data to a text file for your records or for use by Technical Support.



To save the **Critical Events** shown in the upper History pane to a text file:

1. On the Menu Bar, click **Get History Data**.
2. Under the File Information section, click **Save** beside the label "**Save critical data to file**".
3. The Save As dialog appears.
4. Select the folder where you want to save the file.
5. Change the default file name if desired.
6. Click **Save**.
7. The file is saved in the folder you selected in Step 3.

To save **all History Events** shown in the lower History pane (this includes the top 24 Critical Events) to a text file:

1. On the Menu Bar, click **Get History Data**.
2. Under the File Information section, click **Save** beside the label "**Save all data to file**".
3. The Save As dialog appears.
4. Select the folder where you want to save the file.
5. Change the default file name if desired.
6. Click **Save**.
7. The file is saved in the folder you selected in Step 3.

## Setting PIPE II Reminders

You can set a Reminder that will cause the PIPE II to double-beep to remind the user to make a tour. Reminders are based on the PIPE clock time – **NOT** the elapsed time since the last button scan – and start at 12:00AM (00:00). For example:

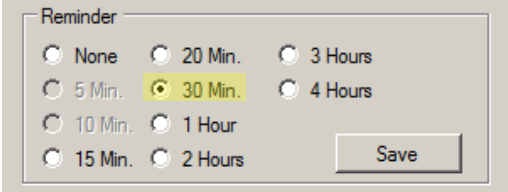
- 15 Minute Reminder: the reminder beep will occur every 15 minutes starting at 12:00AM.
- 1 Hour Reminder: the reminder beep will occur every hour starting at 12:00AM.
- 4 Hour Reminder: the reminder beep will occur every four hours starting at 12:00AM.

When triggered, the Reminder beep will occur every minute until a button is scanned or the Reminder is turned off using PIPE Utility.

**NOTE:** If the PIPE II is set to Silent Mode (see next page), the Reminders section will be disabled. Setting the PIPE II to Silent Mode also disables the Reminder beep. The PIPE's Reminder setting will be restored when you return it to Beep Mode.

### To set the Reminder:

- In the Reminder section, select the desired interval (in this example, 30 Min.) then click **Save**.

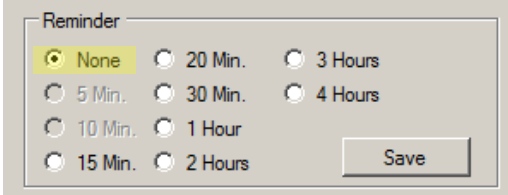


The screenshot shows a 'Reminder' settings window with a title bar. It contains ten radio button options arranged in three rows: 'None', '20 Min.', '3 Hours' in the first row; '5 Min.', '30 Min.', '4 Hours' in the second row; and '10 Min.', '1 Hour', '15 Min.', '2 Hours' in the third row. The '30 Min.' option is selected, indicated by a filled radio button and a yellow highlight. A 'Save' button is located in the bottom right corner.

**NOTE:** if any Reminder options are disabled, it means the PIPE's firmware version does not support them. This will also be noted in the PIPE Information section's message field.

### To disable the Reminder:

- In the Reminder section, select **None** then click **Save**.



The screenshot shows the same 'Reminder' settings window. In this instance, the 'None' option is selected, indicated by a filled radio button and a yellow highlight. All other options are unselected. The 'Save' button remains in the bottom right corner.

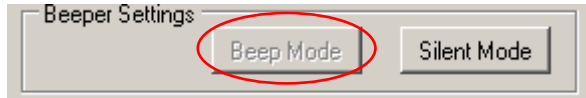
## PIPE II Beeper Settings

The PIPE II's Beeper can be turned off. This is useful for late-night tours or other situations where the beeper's noise may be disruptive or undesirable.

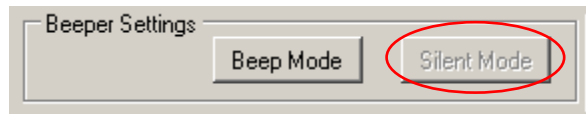
### To view the current PIPE II Beeper Settings:

Insert the PIPE II. In the Beeper Settings section, the current beeper setting is indicated by the disabled button.

**Beep ON:**

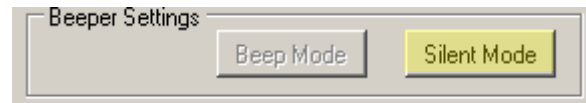


**Beep OFF:**



### To turn the PIPE II Beeper off:

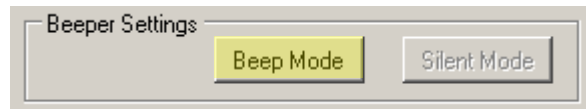
- In the Beeper Settings section, click **Silent Mode**.



**NOTE:** If the PIPE II has a Reminder set, setting the PIPE II to Silent Mode will disable the Reminder beep. The PIPE's Reminder setting will be restored when you return it to Beep Mode.

### To turn the PIPE II Beeper on:

- In the Beeper Settings Section, click **Beep Mode**.



## Troubleshooting PIPE II

The History and Critical Event Logs tell you how the PIPE II has been handled. For an explanation of some of the various Event types and their causes, refer to the table below. All of these Events indicate handling outside the normal usage conditions of PIPE II.

Event Type	Possible Causes	
Tip Shorted	<ul style="list-style-type: none"> <li>• Placing a metal object across the tip</li> <li>• Submerging the PIPE II in water</li> </ul>	
Undervoltage	<ul style="list-style-type: none"> <li>• Connecting the PIPE II to an external power source (negative terminal)</li> </ul>	
Overvoltage	<ul style="list-style-type: none"> <li>• Connecting the PIPE II to an external power source (positive terminal)</li> </ul>	
Mechanical Shock	<ul style="list-style-type: none"> <li>• Dropping the PIPE II deliberately with an undue amount of force</li> </ul>	
	Volts	Equivalent Drop to Concrete
	1.2V – 1.4V	8 foot drop
	1.4V – 1.8V	16 foot drop
1.8V – 2.1V	24 foot drop	

## How to Contact Technical Support

- Visit our Knowledge Base at [www.guard1.com/support](http://www.guard1.com/support)
- Via email at [support@guard1.com](mailto:support@guard1.com) (or [eurosupport@guard1.com](mailto:eurosupport@guard1.com) in Europe)
- Via phone at 216-595-0695 (or +32 3 285 95 70 in Europe)