Preface

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The goal of Eaton’s Cutler-Hammer business unit is to ensure your greatest possible satisfaction with the operation of our products. We are dedicated to providing fast, friendly and accurate assistance. That is why we offer you so many ways to get the support you need. Whether it’s by phone, fax or email, you can access Eaton’s Cutler-Hammer support information 24 hours a day, seven days a week. Our wide range of services are listed below.

You should contact your local distributor for product pricing, availability, ordering, expediting and repairs.

Website Address  
www.cutler-hammer.eaton.com

Use the Cutler-Hammer website to find product information. You can also find information on local distributors or Cutler-Hammer sales offices.

**e-COM Support Center**

| Voice: 800-356-1243 (8AM-6PM EST) |
| FAX: 800-752-8602 |
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| • 414-449-7100, selection 5 (8AM-5PM EST) |
| FAX: 614-882-0417 |
| EMAIL: CHATechSupport@eaton.com |
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If you are in the US or Canada, and have OI/PLC/IPC questions, you can take advantage of our toll-free line for technical assistance with hardware and software product selection, system design and installation, and system debugging and diagnostics. Technical support engineers are available for calls during regular business hours.

**European PanelMate Support Center**

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This center, located in Zurich, Switzerland, provides high-level quality support and product repair services for your PanelMate products. You will receive real-time technical and application support.
Information Fax-Back Service    VOICE: 614-899-5323
For Legacy Products
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Repair and Upgrade Service    VOICE:
(support for OI & IPC)
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• 414-449-7100, selection 5, 4 (8AM-5PM EST)
FAX: 614-882-3414
EMAIL: RepairCHA@eaton.com
If you have questions regarding the repair or upgrade of an OI/IPC, contact your local distributor. Additional support is also available from our well-equipped Repair and Upgrade Service department.
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Chapter 1: Introduction

In this chapter, you will learn about the PanelMate Trend Viewer.
Trend Viewer

The Trend Viewer provides a visual tool to the operator to monitor process or machine operation over time in order to insure product quality and uniformity, and maximize productivity through reduced downtime. The operator uses the Trend Viewer to anticipate and correct process drift through monitoring trends of critical control and quality parameters over time.

At a touch the operator, supervisor, process engineer, or quality technician can:

- Switch between preconfigured trend charts
- Change time scales and pen scaling
- View time and value readings at any point of the chart
- Scroll backward and forward in time
- Zoom into and out of an area of the trend
- Easily generate a histogram of a single variable and display statistics for that variable.
- Easily generate an XY plot of any two variables.
- Assign pens to addition trend variables
- And much more ……

Trend Viewer Display Window

The Trend Viewer application kit comes preloaded and ready to run on the PanelMate ePro XE models.
Chapter 2: Getting Started With The Trend Viewer

In this chapter, you will learn:

• About files used with the Trend Viewer
• About the Trend Viewer demo
• About installing and uninstalling the Trend Viewer
Files Used With Trend Viewer

There are several files that you must know about when using the Trend Viewer.

- **filename.cht** – chart file. This file contains the attributes for one trend chart. The .cht files are created and edited while using the Trend Viewer in run mode. Note that the icons for chart file new, open, save and close as well as add pens or pen properties must be available to create/edit the .cht files.

- **Trend Viewer.exe** - Trend Viewer runtime and configuration program. If you execute the Trend Viewer program with configure as the command line argument then the Trend Viewer program will run in configuration mode. The configuration mode allows you to set up the DDE link and determine what icons will be shown in the toolbar when using the Trend Viewer in run mode. If there is no command line argument specified then the Trend Viewer program will execute in run mode. The chart files are created and edited while using the Trend Viewer in run mode.

The Trend Viewer displays real-time data by interfacing with an OPC server. As a result, you will need to install an OPC server for the Trend Viewer to receive real-time data. Note that if the Trend Viewer is displaying historical data only then an OPC server is not required, however an OPC server is required to read data for the historian database. In other words OPC is required to show real-time data or to read data for the historian, but it is not required to view logged data from the historian.

Trend Viewer and Trend Historian

The Trend Viewer can display real-time data or archived data. The real-time data is read by an OPC server and is stored locally for a finite time. If it is required that data is stored for historical reference then a Trend Historian (catalog numbers TRENDH25, TRENDH75 or TRENDH300) will be needed. The Trend Historian software typically resides on a networked file server and PC workstation and receives data from the individual Operator Interface stations via a logger utility. If the Trend Viewer is to be used to only display historical data that has been logged by other units, then no additional software is required by the Trend Viewer to retrieve and display the data (ie - no OPC server is required).

Additional Documentation

Additional detailed documentation can be found by opening the Canary Labs Trend Link help file using Start>Programs>Canary Trending>Canary Helps. The Trend Viewer is based on the Trend Link software developed by Canary Labs.

Trend Viewer Demo

A demo of the Trend Viewer is preloaded on the PanelMate ePro XE models. This demo will automatically run when you power up the PanelMate ePro XE. Once the demo is launched you can demonstrate the Trend Viewer by selecting the Trend Viewer button from the PanelMate ePro XE menu page (explore and have some fun).
If you want to see how the Trend Viewer Demo was configured you can review the XEdemo.pps and demoxxx.cht files in more detail using the configuration software. The demo files are provided on the PanelMate Power Pro software CD (V2.21 and above). The demo files can be found under PM\Demos\ePro XE. The demo configuration will demonstrate the Trend Viewer in addition to the three other application kits: Document Viewer, Headline Manager and Recipe Manager. The demo files are as follows:

<table>
<thead>
<tr>
<th>File Name</th>
<th>File Path</th>
<th>File Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PMStart.cmd</td>
<td>D:\</td>
<td>Startup command file</td>
</tr>
<tr>
<td>XEdemo.pps</td>
<td>D:\Cfg\</td>
<td>PanelMate configuration</td>
</tr>
<tr>
<td>XEdemo.ois</td>
<td>D:\Cfg\</td>
<td>Recipe program</td>
</tr>
<tr>
<td>recipelist.csv</td>
<td>D:\Cfg\</td>
<td>Recipe list</td>
</tr>
<tr>
<td>demo.dcv</td>
<td>D:\Document Viewer\</td>
<td>Document Viewer configuration</td>
</tr>
<tr>
<td>demo_home.htm</td>
<td>D:\Document Viewer\</td>
<td>Document Viewer home page</td>
</tr>
<tr>
<td>demobot.hlm</td>
<td>D:\Headline Manager\</td>
<td>Headline configuration (bottom)</td>
</tr>
<tr>
<td>demohl.csv</td>
<td>D:\Headline Manager\</td>
<td>Headline messages</td>
</tr>
<tr>
<td>demomid.hlm</td>
<td>D:\Headline Manager\</td>
<td>Headline configuration (middle)</td>
</tr>
<tr>
<td>demotop.hlm</td>
<td>D:\Headline Manager\</td>
<td>Headline configuration (top)</td>
</tr>
<tr>
<td>demo_xxx.csv</td>
<td>D:\Recipe Manager\</td>
<td>Recipe files (ingredients)</td>
</tr>
<tr>
<td>demoRamps.cht</td>
<td>D:\Trend Viewer\</td>
<td>Trend Viewer chart configuration (ramp)</td>
</tr>
<tr>
<td>demoRandom.cht</td>
<td>D:\Trend Viewer\</td>
<td>Trend Viewer chart configuration (random)</td>
</tr>
<tr>
<td>demosSinewave.cht</td>
<td>D:\Trend Viewer\</td>
<td>Trend Viewer chart configuration (sine)</td>
</tr>
</tbody>
</table>

These files are preloaded onto a PanelMate ePro XE into the directories listed above. The demo can be started by selecting Start>Run PMStart.

The demo .pps file uses an OPC server (simulation driver) to simulate reading data from a PLC for the Trend Viewer and demo pages.

**Downloading Trend Viewer Files**

If you are creating the Trend Viewer chart files on a computer different from the online unit you must copy the Trend Viewer files to the application area on the target unit. You will need to copy all .cht files to the target unit.

In Chapter 3 you will learn about configuration for the Trend Viewer application kit. The configuration process must be done on the target unit; there are no configuration files to download.

Note: When using a PanelMate ePro XE, it is recommended that you copy the user-created .cht files to the D:\Trend Viewer\ directory. The D:\ partition is designated as the user area and can be written to when the unit is in Protect Mode.
Installing Trend Viewer Software

On the PanelMate ePro XE models the current Trend Viewer software will be pre-installed along with the Trend Link Control software and the Logger Application software. If you want to upgrade your Trend Viewer, Trend Link Control or Logger Application software to a newer version then you will need to install the software from the PanelMate Power Pro software CD (V2.1 and higher). Note that PanelMate ePro XE models have expanded storage and memory areas to support the Trend Viewer and other application kits. The Trend Viewer is not supported by the PanelMate ePro base and X1 models.

**Trend Viewer Software**

Once you have prepared the target unit for software downloads and have initiated the installation process, you will need to select the following items from the installation program in the sequence listed.

- Install Software
  - Install PanelMate Kits
  - Install Application Kits

If it is a first install then you can choose between Full, Compact or Custom installation. Selecting the Full option will result in all application kits being installed. If you select Custom then you can select the combination of kits that you want installed.

If the application kit software has already been installed you can choose between Modify, Repair and Remove. Modify will let you select the files you want to install and uninstall. Repair will replace the files already installed and Remove will uninstall all of the installed files.

The Trend Viewer files are installed (default location) in a folder called:

```
C:\Program Files\Cutler-Hammer\PanelMate Application Kits\Trend Viewer Software
```

**Trend Link Control Software**

The Trend Link Control software is required for the Trend Viewer to function properly so you will also need to install the Trend Link Control software. Select the following items from the installation program in the sequence listed.

- Install Software
  - Install PanelMate Kits
  - Install Trend Link Control

**Logger Application Software**

The Logger Application software is required when using the optional Trend Historian on a remote server. Select the following items from the installation program in the sequence listed to install the Logger Application software. If you are not using the Trend Historian you do not need to install this software.

- Install Software
Uninstalling Trend Viewer Software

**Trend Viewer Software**

If you are not going to use the Trend Viewer software, you can uninstall the software.

On a PanelMate ePro select the following:

Start>Programs>PanelMate Software>Uninstall PanelMate Application Kits

On a PC use the Add/Remove Programs feature to remove the program. Select PanelMate Application Kits to launch the installation wizard.

In both cases, you will be presented with the choice of Modify, Repair and Remove. Select Modify and then uncheck the files you want removed or select Remove to remove all of the application kit files.

**Trend Link Control Software**

If you need to uninstall the Trend Link Control software from a PanelMate ePro you will need to run the installation program. Select the following items from the installation program in the sequence listed.

- Install Software
  - Install PanelMate Kits
  - Install Trend Link Control

You will be presented with a dialog box with check boxes. Clear the checks for the items you want uninstalled and follow the remaining prompts.

On a PC use the Add/Remove Programs feature to remove the desired programs. Select Canary Trend Link ActiveX Control to have the software uninstalled.

**Logger Application Software**

If you need to uninstall the Logger Application software from a PanelMate ePro you will need to run the installation program. Select the following items from the installation program in the sequence listed.

- Install Software
  - Install PanelMate Kits
  - Install Logger Application

You will be presented with a dialog box with check boxes. Clear the checks for the items you want uninstalled and follow the remaining prompts.
On a PC use the Add/Remove Programs feature to remove the desired programs. Select Canary Trend Historian to have the software uninstalled.
Chapter 3: Configuration Using the Trend Viewer

In this chapter, you will learn:

• How to create Trend Viewer files
• How to use the sample file to help you build configurations
Configuring Trend Viewer Runtime Settings

To configure Trend Viewer settings you use the Trend Viewer program in configuration mode. To run the Trend Viewer in configuration mode select the following:

Start>Programs>PanelMate Software>Trend Viewer>Trend Viewer Config

Once you have started the Trend Viewer program in the configuration mode you will see the following window with default values assigned to all fields.

Customize Toolbar - select this button if you want to customize the Trend Viewer toolbar. After you select this button you will see the Customize Toolbar dialog box that allows you to add, delete and position icons that will be presented when the Trend Viewer is in run mode.

User Can Customize Toolbar at Runtime checkbox - select this checkbox if you want the operator to be able to modify the Trend Viewer toolbar while the Trend Viewer is in run mode. If this checkbox is selected, the user simply double-clicks in the icon "clear" area to call up the Customize Toolbar dialog box. It is recommended that once the toolbar is determined that this checkbox is deselected so that changes can not be made while in run mode. It will be useful to allow toolbar changes during development, debug, and commissioning stages of a project, but should be disabled once the project is turned over for normal operation.

Default Chart - file name of the chart file (.cht) that will be displayed when the Trend Viewer is first opened. The chart file path is entered in the Chart Directory field.

Chart Directory - path name for the Trend Viewer chart files (.cht files). All of the chart files in the specified directory will be listed in the Chart Title drop down menu when in run mode. The files will also be available when selecting the Open Chart icon. When using the PanelMate ePro it is recommended that the Chart Directory is set to D:\Trend Viewer.

Start Hidden checkbox - select the checkbox if you want the Trend Viewer to be hidden after it is launched. The Trend Viewer is typically launched via the PMStart.cmd file after the PanelMate PC Pro software has launched.
DDE Link Settings Topic - DDE topic for the Item. The format is `applicationname|topic` where `applicationname` is the name of the program providing the data. When using PanelMate ePro or PC Pro the `applicationname` is PMC. The `topic` is typically a scratchpad variable so it is defined as “sp”. An example for this field is PMC|sp. The `applicationname` and `topic` are separated by the “|” character. Note that this is the bar or pipe character and not a lower case letter L ( l ).

Item – address or tagname for the trigger value. In run mode, when the value changes to 1, the Trend Viewer window will be displayed. The trigger value is typically changed by including a PanelMate variable-sized control button defined as Normally Closed Momentary on a page or multiple pages. When pressed, the button will clear the trigger value (0) and then set the trigger value (1) causing the Trend Viewer window to be displayed.

Customizing the Trend Viewer Run-Time Toolbar

When the Customize Toolbar button is pressed or the operator double-clicks a clear space in the toolbar and the User Can Customize Toolbar at Runtime checkbox has been selected then the following Customize Toolbar window will appear.

Unselected Items - list of icons that will not be included in the Trend Viewer when in run-mode.

Selected Items - list of icons that will be included in the Trend Viewer when in run-mode. The order in which the items appear in the Trend Viewer toolbar is determined by the order in the Selected Items pane. The icons may be repositioned by using the up and down arrow buttons. The Separator icon may be inserted anywhere in the Selected Items list and it may be inserted multiple times so that spacing can be customized.
> - moves an icon from the Unselected Items pane and adds it before the highlighted item in the Selected Items pane.

< - moves an icon from the Selected Items pane and adds it before the highlighted item in the Unselected Items pane.

Moves an icon up the Selected Items list. The order in which the items appear in the Trend Viewer toolbar is determined by the order in the Selected Items pane.

Moves an icon down the Selected Items list. The order in which the items appear in the Trend Viewer toolbar is determined by the order in the Selected Items pane.

OK - saves the current icon configuration

Reset - returns to the default icon configuration

Cancel - ignores all changes since the Customize Toolbar window was opened.

A picture of the Trend Viewer window with some of the possible control icons is shown below. An explanation of each icon/control is found in Chapter 4 - Using the Trend Viewer in Run Mode.
Configuring Trend Viewer Charts (.cht Files)

If you would like to edit an existing .cht file then select the Open Chart icon and select the desired chart (.cht) file. If the chart is already in the chart list then just select the chart and edit its properties or add pens. When you are done with the editing process then select the Save Chart icon to save the new .cht file.

To create a new chart, select New Chart icon. To add pens to the chart use the Add Trend(s) icon and select the data source for each pen. For additional information on creating charts refer to the Canary Labs TrendLink help files included on the PanelMate Power Pro software CD (V2.1 or greater).

Configuring PanelMate Applications for the Trend Viewer (.pps Files)

In order to switch between the PanelMate application and the Trend Viewer running in the background you must add a variable-sized pushbutton to each page from which you wish to call the Trend Viewer. The Variable-Sized Control Button should be set to Normally-Closed, Momentary and the reference should match the item configured in the Trend Viewer Configuration dialog’s DDE Link field. The normally closed momentary setting results in setting the reference to a value of 0 when pressed and 1 when released. This allows the switch to the Trend Viewer window to take place upon the release of the pushbutton so that the button state will be in the normal state when the PanelMate window is reselected upon hiding the Trend Viewer window. As an example, if the DDE Link field is set to Topic: PMC|sp, and the item is set to trend then the following dialog settings for the control button would be correct:
Using the Sample Files

A sample .pps file can be found on the PanelMate Power Pro software CD (V2.1 and higher) under PM\Kits\Sample to help you build your PanelMate configuration that will be using the Trend Viewer. The sample.pps file contains a page 197 that includes variable-sized control buttons (defined as Normally Closed Momentary) that can be used to set the DDE link trigger to call up the Trend Viewer program. You can simply copy the desired variable-sized control buttons to your application. The sample.pps button for Trend Viewer changes the value of the scratchpad variable trend to 0 and then to 1. If necessary you can change the scratchpad variable name used in the button and assigned during the configuration mode.

Control Buttons - Sample Configuration Page 197
Chapter 4: Using the Trend Viewer in Run Mode

In this chapter, you will learn:

- How to launch the Trend Viewer
- How to use the Trend Viewer in run mode
Trend Viewer Launching Methods

The Trend Viewer is designed to run in tandem with the PanelMate PC Pro application. There are two recommended ways to launch the Trend Viewer with a PanelMate PC Pro configuration:

1) Using the startup PMStart.cmd file at boot-up
2) Using Start>Run PMStart

Note: During boot-up, there will be no messages displayed telling you that the Trend Viewer is launching, but you will see the Window appear upon initialization, and then disappear when initialization is complete (assuming you have selected the checkbox Start Hidden in the Trend Viewer Configuration dialog).

Using the Startup PMStart.cmd File to Automatically Launch a Configuration and Trend Viewer

When your run time unit boots up, it automatically launches the PMStart.cmd file. If you would like the run time unit to automatically launch your configuration and Trend Viewer, you can do so by editing the PMStart.cmd file using Notepad. To do this, complete the following steps.

Note: When using a PanelMate ePro, the PMStart.cmd file is found in the root directory of the D:\ partition. See Appendix A for a complete listing of the PMStart.cmd file.

1) Connect a PS/2 mouse and keyboard to your unit.
2) Reboot your unit.
3) Click Start>Explorer.
4) Browse to find PMStart.cmd and then right-click the file and click Edit.
   Result: Notepad is launched.
5) Edit the following line in the PMStart.cmd file by replacing the XEdemo.pps file name with the name of your ePro configuration.
   
   set MY_CFG=d:\cfg\XEdemo.pps

6) Make sure the following line is as follows.

   set START_TREND="YES"

7) Save the edited PMStart.cmd file, then close Notepad.

By-Passing the Trend Viewer in the PMStart.cmd File

To turn off the Trend Viewer, follow the steps above except in step 6 edit the line as shown:

Set START_TREND="NO"
Power-Up Sequence

Once power is connected to your PanelMate ePro run time unit, the following occurs:

1) A DOS prompt appears on the screen, informing you that the unit is initializing system resources.

2) The Windows NT Embedded operating system boots up.

3) A Delay-Connecting to Touchscreen Controller window appears, informing you that the unit is loading the touchscreen driver.

4) The PanelMate PC Pro application launches.

5) The Trend Viewer program launches. You will see the Trend Viewer display and if you have selected the Start Hidden checkbox during configuration then the Trend Viewer display will be quickly minimized.

6) Other application kits launch as specified in the PMStart.cmd file.

Note: You may see the error “DDE Link not available” when attempting to initialize the Trend Viewer. If you receive this error it could mean that the DDE server is not established when the Trend Viewer attempts to connect to it. You can increase the sleep time to allow the PanelMate configuration more time to completely load by modifying the following line in the PMStart.cmd file to a time longer than 40 seconds.

   Set CFG_LOAD_TIME=40

Note: 40 seconds is not a minimum; it is just the time frame that the Demo uses.

The error could also be the result of the DDE Topic/Item specified during the Trend Viewer configuration not being found. If PanelMate PC Pro is specified (PMC) then make sure the Topic and Item values are included in the PanelMate configuration file (typically in a variable-sized control button).

Trend Viewer in Run Mode

When the Message Topic and Item value specified in the Trend Viewer Configuration dialog changes to a value of 1 (from the release of the Variable-Sized Control Button configured as a Normally Closed, Momentary writing to the item) the Trend Viewer window will display on top of the PanelMate runtime window. When the Hide button is pressed in the Trend Viewer toolbar, as shown below, the Trend Viewer window will disappear and the PanelMate runtime window will be displayed.
Sample Trend Viewer Display in Run Mode

**Toolbar Controls Definition**

Additional detailed documentation can be found by opening the Canary Labs Trend Link help file using **Start>Programs>Canary Trending>Canary Helps**

- **Chart Title** – displays the name of the currently displayed trend chart. When selected, a drop-down menu will appear with all of the Trend Viewer .cht file names listed (from the Chart Directory specified during configuration). You can select any chart file name from the menu and the selected file will become the currently displayed trend chart.

- **Next Chart** – display the next trend in the list. When the Trend Viewer application initializes, all charts in the Chart Directory are loaded. Additional charts may be loaded through use of the Open Chart function or the New Chart>Add Trend(s)>Save Chart functions. The Next Chart function cycles through the loaded charts one at a time with each touch. When the last loaded chart is displayed it will cycle back to the first chart.
**Legend Display** – legend area toggle control. When depressed the legend is displayed at the bottom of the Trend Viewer window. When recessed the legend display is removed.

**Scale Display** – scale toggle control. When depressed the scale is displayed along two edges of the trend. When recessed the scale is removed.

**Auto Scale** – perform the Auto Scale function.

**Auto Band** – perform the Auto Band function.

**Properties** – opens the Properties dialog box.

**Grid Display** – grid toggle control. When the button is depressed the reference grid is displayed and when the button is recessed the grid is removed.

**Undo Time / Redo Time** - Undo will restore the screen to appear as it did before the last user time changes. Redo will remove the undo operation and return the display to the original state.

**Live Mode** – real-time data display toggle control. When the button is depressed the trended tags are sampled, displayed and optionally archived. When the button is recessed the trend stops scrolling.

**Batch Mode** – batch mode/normal mode toggle control. When the button is depressed the Trend Viewer is in Batch Mode and when the button is recessed the Trend Viewer is in normal mode.

**Hide** – hide the Trend Viewer window and return to the current PanelMate page. The Trend Viewer is recalled by changing the DDE Link trigger value to 1 from a variable-sized control button. This icon should always be in your toolbar so that you can return to PanelMate.

**Print Dialog** – prints the current Trend Viewer windows contents to the default printer. Note: Printers are installed using the Start>Settings>Printers options.

**About** - display version information about the Trend Viewer program.
Annotations – add notes to archived pen data. The notes appear as an icon with a fly-over display of the note. This only applies if the pen data is being archived to a historian database. This action requires a keyboard.

Export - save all data displayed in the current chart into a .csv file.

View Log - display the Trend Viewer log. The log file is located at C:\Program Files\Canary Labs\Shared\CLIERROR. Note that if the ePro is in Protect Mode then the log file will not be saved when the unit is powered down.

Open Chart – open a chart.

New Chart – creates a new, empty chart that can be customized using the “Add Trend(s)” option.

Add Trend(s) – add a pen (data point) to the chart.

Save Chart – save the current displayed trend chart. To save as a new file requires a keyboard.

Close Chart – close the currently displayed trend chart.
In this chapter, you will learn how to troubleshoot the Trend Viewer.
## Trend Viewer Troubleshooting

<table>
<thead>
<tr>
<th>Issue</th>
<th>Possible Cause</th>
<th>Corrective Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>DDE Link not available&lt;br&gt;Topic: xxx</td>
<td>xxx</td>
<td>Issue: xxx&lt;br&gt;Item: xxx</td>
</tr>
<tr>
<td>Trend Viewer window does not maximize when triggered.</td>
<td>The <strong>DDE Link Item</strong> does not match the item being written to by the Variable-Sized Control button.</td>
<td></td>
</tr>
<tr>
<td>After launching the PMC the Trend Viewer is all you can see.</td>
<td>The Start Hidden check box is not checked.</td>
<td></td>
</tr>
<tr>
<td>No charts are available in the Trend Viewer drop down menu.</td>
<td>The Chart Directory specified during configuration is not correct or the chart files have been stored in the wrong path locations.</td>
<td></td>
</tr>
<tr>
<td>The default chart is not appearing when the Trend Viewer window is displayed for the first time.</td>
<td>The Default Chart specified during configuration is not correct or the default chart file is stored incorrectly.</td>
<td></td>
</tr>
</tbody>
</table>
Appendix A: Directories and Files

In this appendix, you will learn:

- About the PanelMate ePro directory and file layout
- About the PMStart.cmd file
PanelMate ePro XE Treeview

The following lists the treeview of the PanelMate ePro XE with the demo files loaded. A similar organization should be used for your application. You can write to the D:\ partition when the ePro is in Protect Mode.

D:

PMStart.cmd demo start-up command file (file content provided below)

Cfg (put the .pps, .ois and recipelist.csv files here)
- XEdemo.pps demo configuration
- demo.ois demo recipe script engine
- recipelist.csv demo list of recipe names
- recipemanager.log log file for the Recipe Manager
- simdemo.opf OPC server configuration (OPC server & simulation driver)
- chddesrv.exe demo DDE server (used for data simulation)

Document Viewer (put the .dcv and data files here)
- demo.dcv demo URL/Filename list
- demo_home.htm demo startup page for Document Viewer
- relnotes.txt demo .txt file to call up
- ePro-8 cutout template.pdf demo .pdf file to call up
- 1219B power supply.jpg demo .jpg file to call up
- ePro.jpg demo .jpg file to call up
- PM help.htm demo .htm file to call up
- *.gif files files for *.htm files

Headline Manager (put the .hlm and headline .csv files here)
- demobot.hlm demo headline specs – bottom
- demohl.csv demo Headline Manager messages
- demomid.hlm demo headline specs – middle
- demotop.hlm demo headline specs – top

Recipe Manager (put the recipe file .csv files here)
- demo_xxx.csv demo Recipe ingredients – 20 files where xxx is the recipe name

Trend Viewer (put the .cht files here)
- demoRamps.cht demo chart with ramp data
- demoRandom.cht demo chart with random data
- demoSinewave.cht demo chart with sine data
PanelMate ePro XE PMStart.cmd File

Here is the **PMStart.cmd** file in its default state. Lines will be edited for your application. See Chapter 4: Trend Viewer Launching Methods for more details. This file can be found on the PanelMate Power Pro CD (V2.21 and higher) in **PM\Demos\ePro XE**

```cmd
@echo off
REM * To set this batch file to automatically start a
REM * PanelMate PC Pro Application, set the variable
REM * MY_CFG to the desired path\filename.
set MY_CFG=d:\cfg\XEdemo.pps

REM * If you are going to start Document Viewer,
REM * Headline Manager, or Trend Viewer after the
REM * PanelMate configuration loads, set the variable
REM * CFG_LOAD_TIME to the number of seconds it takes
REM * to completely boot up the PPS file. Measured from
REM * when begins to load until the first display is drawn
REM * following a power down reboot.
set CFG_LOAD_TIME=40

REM * To set this batch file to automatically start
REM * Document Viewer, set the variable MY_DCVFile
REM * to the desired path\filename of your Document
REM * Viewer Configuration file (.DCV)
REM * To by-pass the Document Viewer use the file name none.dcv
set MY_DCVFile="d:\Document Viewer\demo.dcv"

REM * To set this batch file to automatically start
REM * up to three Headlines, set the variables
REM * MY_TOPHL, MY_MIDHL, and MY_BOT to the desired
REM * path\filename of the three Headline Manager
REM * Configuration files (.HLM)
REM * To by-pass a headline use the file name none.hlm
set MY_TOPHL="d:\Headline Manager\demotop.hlm"
set MY_MIDHL="d:\Headline Manager\demomid.hlm"
set MY_BOTHL="d:\Headline Manager\demobot.hlm"
set MY_PTRHL="d:\Headline Manager\none.hlm"

REM * To automatically start Recipe Manager you do
REM * not need to do anything within this batch file.
REM * Just place the file recipelist.csv in the same
REM * directory as the PanelMate PC Pro application
REM * file (.PPS) and copy the RecipeManager.OIS file to the
REM * same directory and rename the .OIS file to match
```
REM * the name of the .PPS file (Example: Myconfig.OIS)

REM * To automatically start Trend Viewer, leave the
REM * variable START_TREND set to YES. If you do not want
REM * Trend Viewer to start, change to variable to NO

set START_TREND="YES"

if exist %MY_CFG% goto START_APP
goto NO_APP

:START_APP
echo    Starting PanelMate Application %MY_CFG%...
d:
cd d:\cfg
start c:\pmconfig\ntonline\pmc.exe %MY_CFG%
sleep %CFG_LOAD_TIME%

if exist %MY_DCVFile% goto START_DCV
goto NO_DCV

:START_DCV
"C:\PROGRAM FILES\Cutler-Hammer\PanelMate Application Kits\Document Viewer.lnk" %MY_DCVFile%
sleep 2

:NO_DCV
if exist %MY_TOPHL% goto START_TOP
goto NO_TOP

:START_TOP
"C:\PROGRAM FILES\Cutler-Hammer\PanelMate Application Kits\Headline Manager.lnk" %MY_TopHL%
sleep 2

:NO_TOP
if exist %MY_MIDHL% goto START_MID
goto NO_MID

:START_MID
"C:\PROGRAM FILES\Cutler-Hammer\PanelMate Application Kits\Headline Manager.lnk" %MY_MIDHL%
sleep 2

:NO_MID
if exist %MY_BOTHL% goto START_BOT
goto NO_BOT

:START_BOT
"C:\PROGRAM FILES\Cutler-Hammer\PanelMate Application Kits\Headline Manager.lnk" %MY_BOTHL%
sleep 2

:NO_BOT
if exist %MY_PTRHL% goto START_PTR
goto NO_PTR

:START_PTR
"C:\PROGRAM FILES\Cutler-Hammer\PanelMate Application Kits\Headline Manager.lnk" %MY_PTRHL%
sleep 2

:NO_PTR
if %START_TREND% == "YES" goto START_TREND
goto EXIT

:START_TREND
"C:\PROGRAM FILES\Cutler-Hammer\PanelMate Application Kits\Trend Viewer.lnk"
goto EXIT

:NO_APP
echo    PanelMate Application %MY_CFG% Not Found...
sleep 5

:EXIT
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