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# **PanelMate Recipe Manager Users Guide**

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# Preface

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

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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)**  
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**European PanelMate Support Center** **VOICE: +41 1 806 64 44 (9AM-5PM CET)**  
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**VOICE:**

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**EMAIL: [RepairCHA@eaton.com](mailto: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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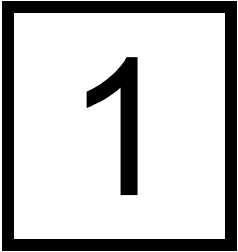
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## Chapter 1: Introduction

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*In this chapter, you will learn about the PanelMate Recipe Manager.*

## Recipe Manager

The PanelMate Recipe Manager application kit allows you to initiate product changeovers requiring hundreds of changes to PLC control settings quickly and easily without PLC programming. You simply store recipe values in files and then with a simple push of a button you download the values to PLCs as required. The standard Recipe Manager application kit supports 500 different recipes with up to 500 ingredients in each recipe. A 25,000 recipe entry maximum is recommended for optimum performance (ex. 50 recipes with 500 ingredients or 500 recipes with 50 ingredients).

Traditionally, setting up a machine for a different product or recipe required users to store all recipe/setup parameters in spare PLC memory and then program the PLC to switch recipes using ladder logic. Alternately, users could employ PC-based SCADA packages to manage their recipe data. Both solutions have shortcomings. PLCs are not very efficient for storing large amounts of data and PLC programs are not very secure for saving critical process parameters or proprietary process information and formulas. SCADA packages are fairly expensive, complex, and engineering resource intensive and often require a Windows disk-based PC on the plant floor.

By using the Recipe Manager you can offload large amounts of data from your PLC. In addition, the Recipe Manager kit is easy to understand and use. All recipes are created in Microsoft Excel, Notepad or WordPad and saved as comma-separated-variable (.csv) text files. The files can be stored on the PanelMate or on any shared network drive over Ethernet.

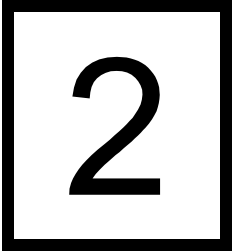
You access the Recipe Manager operations by using a pre-designed Recipe Manager configuration page in your PanelMate configuration. When online, you simply highlight the desired recipe and then select the desired operation. You can download recipe values to a PLC, compare recipe values in a recipe with what is stored in a PLC or capture recipe data in a PLC and store it to a recipe file. You can also add your own configuration pages so that you can use the PanelMate to view and/or modify recipe values stored in a PLC.

The Recipe Manager application kit comes preloaded and ready to run on the PanelMate ePro XE and X1 models. When using the PanelMate ePro X1 models, the Recipe Manager must be selected as the one active kit before it can be used.



## Chapter 2: Getting Started With The Recipe Manager

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*In this chapter, you will learn:*

- *About files used with the Recipe Manager*
- *About the Recipe Manager demo*
- *About installing and uninstalling the Recipe Manager*

## Files Used With Recipe Manager

There are several files that you must know about when using the Recipe Manager.

- **configname.ois** - Recipe Manager runtime program. This file is a copy of the **RecipeManager.ois** master file. The file name **configname** is assigned so that it is the same as the name of the PanelMate PC Pro configuration file **configname.pps**. Every configuration that uses the Recipe Manager must have an associated **.ois** file. The **.ois** and **.pps** files are stored in the same path location (directory).
- **configname.pps** - PanelMate configuration file with pages that support the Recipe Manager operations. The name of the **.ois** file and the name of the **.pps** file must be the same and the files must be stored in the same path location (directory).
- **messagefile.csv** - optional message file with messages 1000-1039 assigned to support the PanelMate configuration Recipe Manager pages. If a Message Library is used instead of a message file then the same messages 1000-1039 must be included. The required messages are available in the sample files for use in your PanelMate configuration. Refer to Chapter 3: Messages Required For the Recipe Manager for information about message files. This is a comma-separated-variable text file.
- **recipefile.csv** - recipe file. Each recipe file contains a list of ingredients for a recipe. The file is a comma-separated-variable text file. See Chapter 3: Creating Recipe Files for file format details. The path and file name of **recipefile.csv** must match the path and file name stored in the **recipelist.csv** file. There is a **recipefile.csv** file for each recipe listed in the **recipelist.csv** file.
- **recipelist.csv** – recipe list. This file contains the list of recipe names (500 maximum). The file is a comma-separated-variable text file. See Chapter 3: Creating The Recipe List File for file format details. Each recipe named in the list will have an associated recipe file (**recipefile.csv**) with recipe ingredients.
- **recipemanager.log** - Recipe Manager operation log file. This file is created and appended by the Recipe Manager as different actions are completed. The contents of the file are typically displayed on a PanelMate configuration page for quick status reference. The file is found in the same path location as the **configname.ois** and **recipelist.csv** files.
- **RecipeManager.ois** - Recipe Manager runtime program master. You copy the **RecipeManager.ois** file to create the **configname.ois** file.

## Recipe Manager Demo

A demo of the Recipe Manager is preloaded on the PanelMate ePro XE and X1 models. This demo will automatically run when you power up the PanelMate ePro XE. Once the demo is launched you can demonstrate the Recipe Manager by selecting the Recipe Manager button from the PanelMate ePro XE menu page (explore and have some fun). On the X1 models the Recipe Manager kit must be selected and changes made to the **PMStart.cmd** file before the Recipe Manager can be demonstrated. See **Appendix A PanelMate ePro X1 PMStart.cmd File** for details.

If you want to see how the Recipe Manager was configured you can review the **XEDemo.pps** or **RMdemo.pps**, **recipelist.csv** and **recipefile.csv** 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\lePro XE** or **PM\Demos\lePro X1**. The demo configurations demonstrate the Recipe Manager in addition to the three other application kits: Document Viewer, Headline Manager and Trend Viewer (XE models only). Note that the X1 model will only demonstrate the one kit currently enabled on the system. The demo files are as follows:

File Name	PanelMate ePro XE/X1 File Path	File Description
PMStart.cmd	D:\	Startup command file
XEdemo.pps or DVdemo.pps or HMDemo.pps or RMdemo.pps	D:\Cfg\	PanelMate configurations
XEdemo.ois or RMdemo.ois	D:\Cfg\	Recipe programs
recipelist.csv	D:\Cfg\	Recipe list
demo.dcv	D:\Document Viewer\	Document Viewer configuration
demo_home.htm	D:\Document Viewer\	Document Viewer home page
demobot.hlm	D:\Headline Manager\	Headline configuration (bottom)
demohl.csv	D:\Headline Manager\	Headline messages
demomid.hlm	D:\Headline Manager\	Headline configuration (middle)
demotop.hlm	D:\Headline Manager\	Headline configuration (top)
demo_xxx.csv	D:\Recipe Manager\	Recipe files (ingredients)
demoRamps.cht	D:\Trend Viewer\	Trend Viewer chart configuration (ramp)
demoRandom.cht	D:\Trend Viewer\	Trend Viewer chart configuration (random)
demoSinewave.cht	D:\Trend Viewer\	Trend Viewer chart configuration (sine)

The appropriate files are loaded onto the PanelMate ePro XE and X1 models into the directories listed above. The demo can be started by selecting **Start>Run PMStart** or rebooting the system.

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

## Downloading Recipe Manager Files

If you are creating the Recipe Manager **.csv** files on a computer that is different from the online unit you must copy the Recipe Manager files to the application area on the target unit. You will need to copy all **.csv** files to the target unit.

The **configname.ois** and **recipelist.csv** files must be stored at the same path location as the PanelMate configuration **.pps** file. If multiple PanelMate configurations are being stored on the target unit, then separate sub-directories are required for each configuration **.pps** file, **.ois** file and **recipelist.csv** file group.

Note: When using a PanelMate ePro XE or X1, it is recommended that you copy the **recipefile.csv** files to the **D:\Recipe Manager\** directory and the **.pps** file, **.ois** file and **recipelist.csv** to the **D:\Cfg\** directory or a new sub-directory within the **D:\Cfg\** directory. The **D:\** partition is designated as the user area and can be written to when the unit is in Protect Mode.

## Installing Recipe Manager Software

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

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 Recipe Manager files are installed (default location) in a folder called:  
**C:\Program Files\Cutler-Hammer\PanelMate Application Kits\**

## Selecting the Recipe Manager on PanelMate ePro X1 Units

PanelMate ePro X1 models are designed to run one of three application kits. The Document Viewer application kit is the default selected kit. You must activate the Recipe Manager kit by using the Application Kit Selection Utility. To select the Recipe Manager Kit on your PanelMate ePro select **Start>Programs>ePro Tools>Kit Selection**. Select the Recipe Manager radio button and then **OK** to complete the selection.



## Uninstalling Recipe Manager Software

If you are not going to use the Recipe Manager 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.

## Chapter 3: Recipe Manager Configuration

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# 3

*In this chapter, you will learn:*

- *How to create Recipe Manager files*
- *How to build PanelMate configurations for the Recipe Manager*

## Creating Files for the Recipe Manager

You will need to prepare five different types of files before you can use the Recipe Manager in run mode. The file formats are described in further detail in this chapter.

1. Recipe Manager run time program file - **configname.ois**
2. Recipe list file - **recipelist.csv**
3. Recipe files - **recipefile.csv**
4. PanelMate configuration files with the Recipe Manager pages - **configname.pps**
5. Message Library or an External Message File (**messagefile.csv**) for messages required by the Recipe Manager. See the section Messages Required for the Recipe Manager in this chapter for more information.

### Creating the Recipe Manager Run Time Program File (**configname.ois**)

For each PanelMate configuration that uses recipes you will need a **configname.ois** file where **configname** is the same as the name of the configuration **.pps** file. Use Windows Explorer to create a copy of the **RecipeManager.ois** and then rename the file appropriately. The **RecipeManager.ois** master file can be found in the default location of **C:\Program Files\Cutler-Hammer\PanelMate Application Kits\**.

Example .pps file name: **batch1.pps**

.ois file name: **batch1.ois**

### Creating the Recipe List File (**recipelist.csv**)

The **recipelist.csv** file is a list of all the recipe names. You can store a maximum of 500 recipe names in the file.

The file is a comma-separated-variable text file that is created/edited using Microsoft Excel, Notepad or WordPad.

The format of the **recipelist.csv** file is as follows:

Column 1 – recipe name

Column 2 – path and file name for the recipe file **recipefile.csv** which contains the list of recipe ingredients. If no path name is given or an incomplete path name is provided then the path (directory) of the **recipelist.csv** file is used.

When using PanelMate ePro it is recommended that the recipe files be stored in the **D:\Recipe Manager**.

Example **recipelists.csv** file:

Strawberry	D:\Recipe Manager\strawberry.csv
Vanilla	D:\Recipe Manager\vanilla.csv
Chocolate	D:\Recipe Manager\chocolate.csv
...	...

## Creating Recipe Files (*recipefile.csv*)

The recipe file **recipefile.csv** contains a list of recipe ingredients for a recipe named in the **recipelists.csv** file. You can store a maximum of 500 recipe ingredients in each file.

The file is a comma-separated-variable text file that is created/edited using Microsoft Excel, Notepad, or WordPad.

The format of the **recipefile.csv** file is as follows:

Column 1 – recipe ingredient or parameter name. Reference only - used to help identify the associated information.

Column 2 – recipe ingredient or parameter value.

Column 3 – recipe ingredient or parameter PLC storage location. This must be in the format of [**plcname**, **plcreference**] where **plcname** is the name of a PLC referenced in the associated PanelMate **.pps** file's PLC Name and Port Table. You must include the **plcname** in every reference even if the PLC name is the default for the configuration. The **plcreference** is the register reference using the syntax per the specifications for your PLC type.

As a rule, tagnames cannot be used as a PLC reference with the exception that ControlLogix tagnames and tagnames created in OPC server can be used if the OPC server uses the tagnames.

Column 4 – units for the recipe ingredient value. Reference only - used to provide additional information about the recipe ingredient value in column 2.

Column 5 – recipe ingredient value offset. For future use. Must be set to zero (0).

Column 6 – recipe ingredient value scale. For future use. Must be set to one (1).



Example **recipefile.csv** file:

sugar	250	[plc1, N7]	lbs.	0	1
vanilla	10	[plc1, N8]	gals	0	1
chips	200	[plc1, N9]	lbs.	0	1
temp	350	[plc1, N10]	Deg C	0	1
mixer	1	[plc1, N11]		0	1
...	...	...	...	0	1

## Configuring PanelMate Applications For Recipe Manager (.pps Files)

### Using The Sample Files

#### *Sample Configuration Pages for Recipe Manager*

A **sample.pps** file has been provided to help you build your PanelMate configuration that will be using the Recipe Manager. You can copy the sample pages to any pages within your configuration. The sample configuration can be found on the PanelMate Power Pro software CD (V2.21 and higher) under **PM\Kits\Sample**. Pages 197, 198 and 199 are shown in this section.

The **sample.pps** file contains a page 198 that displays the recipe names from the **recipelist.csv** file and the operation log. You will want this page in your configuration for basic recipe management.

There is also a page 199 that allows the operator to do everything in page 198 with the addition of 4 more operations such as reading data from the PLC and saving the data in a recipe ingredient file. This page uses Password A (default value of 1) and is intended for advanced recipe management.

See Chapter 4: Using the Recipe Manager in Run Mode for more information about the functionality associated with the different Recipe Manager control buttons.

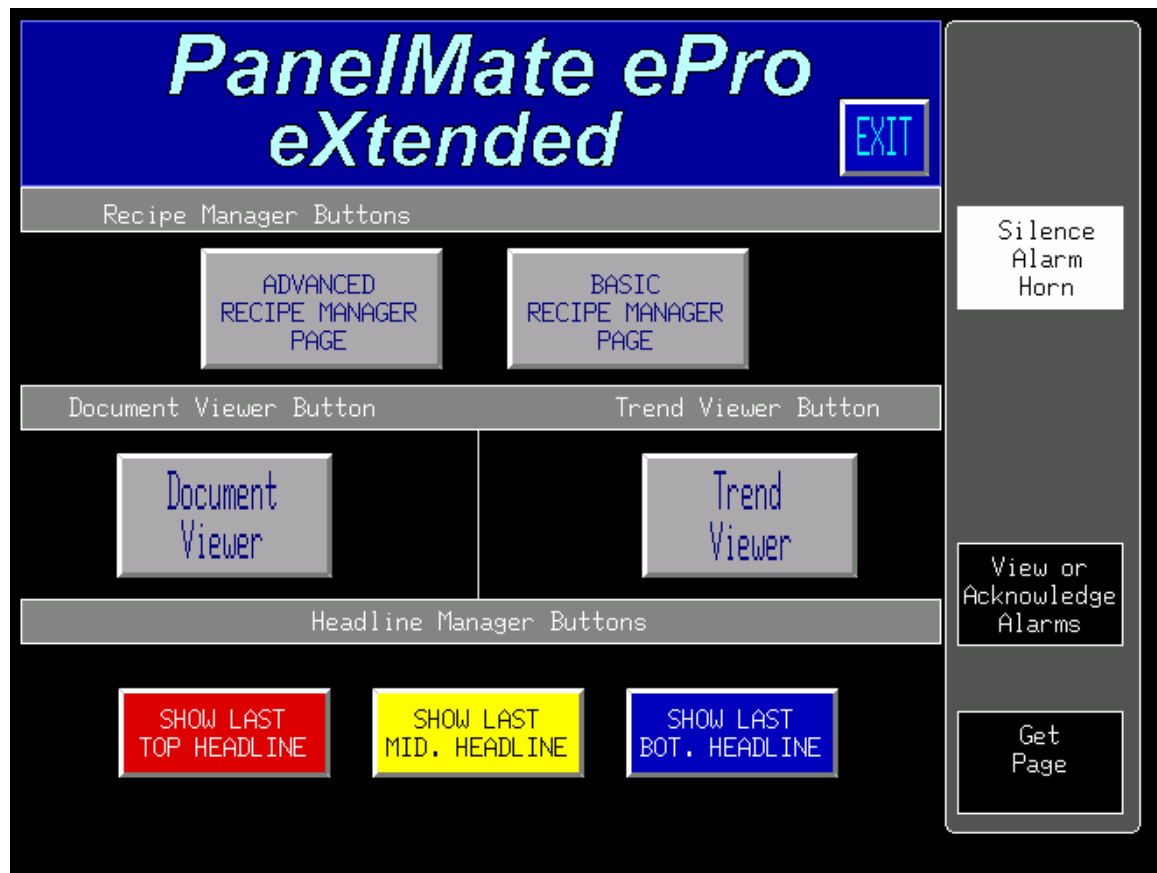
Using the PanelMate Power Pro configuration software, simply copy these pages to your configuration as needed. You can modify these pages to use different terminology and the control buttons can be renamed, moved or deleted. You should not modify the recipe list or the operation log list scroll areas. You can delete or move a whole area if you want to customize your pages but the links between the scroll areas and the messages is critical so you must not expand or delete lines from either scroll area.

You may change the page numbers after copying the desired pages to your configuration by using the Page Properties dialog window. You will also want to modify

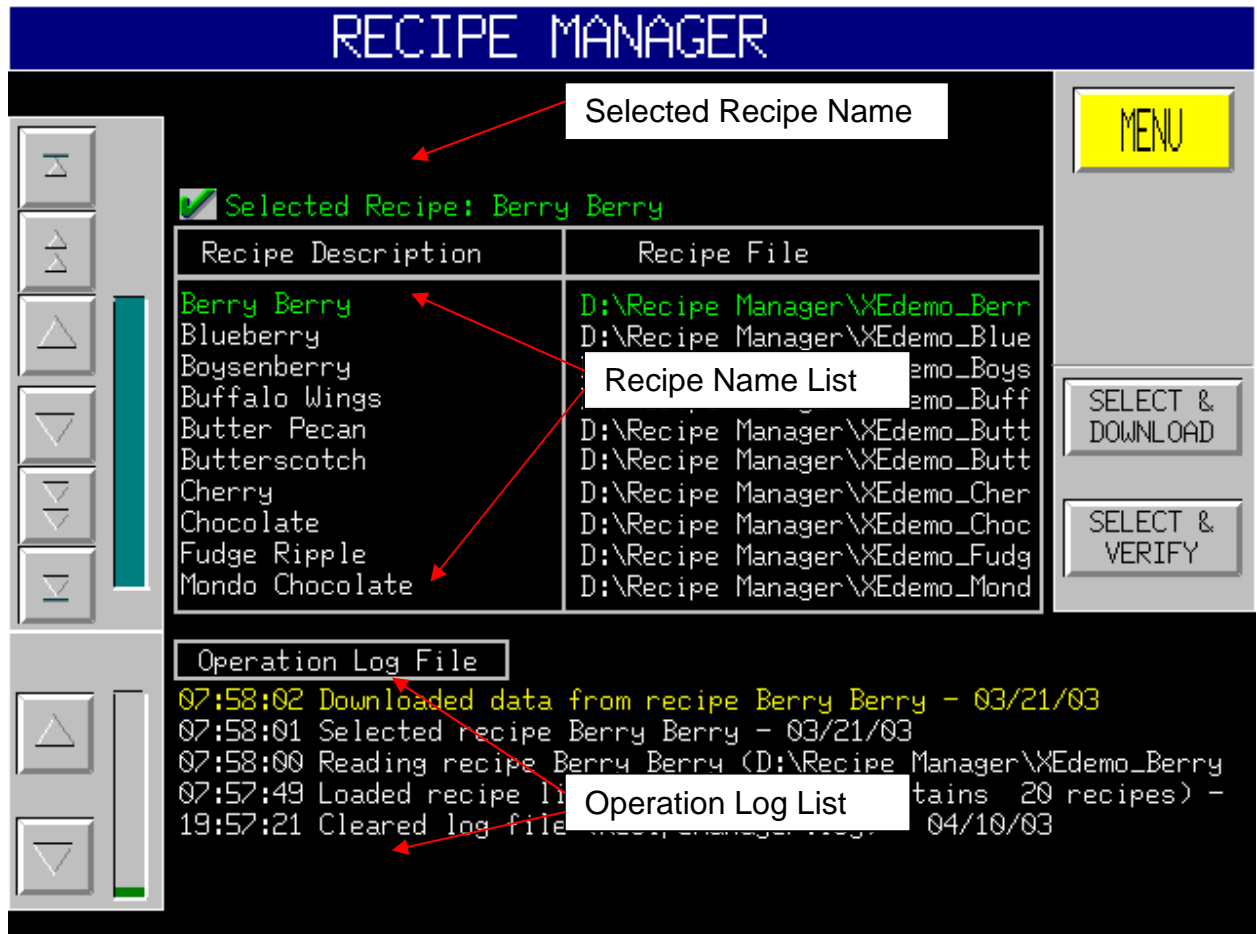
the Menu control button as appropriate for your configuration (it is defined to call page 0).

Note: Both Recipe Manager pages 198 and 199 assume the use of the Flexible Page Layout selection in the Systems Parameters with none of the four Page Properties Flexible Page Layout components selected.

Page 197 of the sample configuration includes a set of different control buttons for calling up the pages associated with the PanelMate application kits. Copy the buttons required and modify as needed for your configuration.



Control Buttons - Sample Configuration Page 197



Recipe Manager Basic Operations - Sample Configuration Page 198



Recipe Manager Advanced Operations - Sample Configuration Page 199

### Messages Required for the Recipe Manager

The Recipe Manager configuration pages are designed to use messages 1000-1039. The **sample.pps** file has a message library with the required messages. These messages are used to display the recipe data and operation log messages on pages 198 and 199 of the sample configuration. If you are using the PanelMate Message Library, you should copy these messages to your Message Library. If you are using an External Message File (.csv) then you will want to use the sample **samplemsg.csv** file and copy messages 1000-1039 to your .csv message file. It is important that you reserve messages 1000-1039 for the Recipe Manager messages. If you are using an External Message File you need to set message 1 in the Message Library to @MSGFILE **messagefile.csv** where **messagefile.csv** is the path and file name of your External Message File.

Note: Make sure that there are no spaces before or after the "@" sign and that there is a space after "MSGFILE" and before the path to the .csv file.

Messages 1000 -1039 are as follows:

1000, 0, 7, 0, 1, (reserved)  
1001, 0, 7, 0, 1, (reserved)  
1002, 0, 7, 0, 1, (reserved)  
1003, 7, 0, 0, 1, (reserved)  
1004, 7, 0, 0, 1, (reserved)  
1005, 2, 0, 0, 1, (reserved)  
1006, 2, 0, 0, 1, (reserved)  
1007, 6, 0, 0, 1, (reserved)  
1008, 7, 0, 0, 1, (reserved)  
1009, 2, 0, 0, 1, (reserved)  
1010, 7, 0, 0, 1, (reserved)  
..... (all the same)  
1039, 7, 0, 0, 1, (reserved)

### ***Symbol Used on Recipe Page***

A symbol called RECIPE HELP is included in the **sample.pps** file that is displayed when the Help control button is toggled on. Copy this symbol to your configuration's Symbol Library to enable this function and avoid export errors. Alternately, you may remove the symbol and the Help button from the Recipe Manager configuration pages before copying them to your configuration.

### **Quick Start Guide**

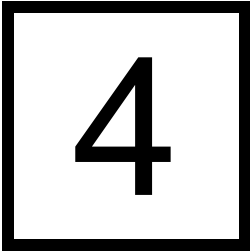
Here is a quick step-by-step list of operations you need to complete to have the Recipe Manager successfully operate as part of your configuration.

1. Import the sample configuration **sample.pps** into your database. Sample will be listed under PanelMate PC Pro in the configuration treeview.
2. Make sure that your configuration has Direct Select and Flexible Page Layout selected (see System Parameters - General Tab).
3. Copy pages 198 and 199 from the sample configuration to your configuration.
4. Modify Menu page change button if needed (default is to call page 0).
5. Copy symbol RECIPE HELP from the sample configuration to your configuration or delete the Help buttons from the Recipe Manager pages.
6. Copy messages 1000-1039 from the sample Message Library to your Message Library or copy messages 1000-1039 from the **samplemsg.csv** file to your External Message File.

7. Export your configuration and copy to target unit. If copying to a PanelMate ePro XE or X1 unit then copy to the **D:\Cfg** directory.
8. Copy **RecipeManager.ois** to the same directory as your configuration file. Rename the **.ois** file to be the same as the **.pps** file name (keep the **.ois** extension).
9. Create the **recipelist.csv** file.
10. Create a **recipefile.csv** file for each recipe listed in the **recipelist.csv** file.
11. Copy the **recipelist.csv** file to the same directory as the **.ois** and **.pps** files. If copying to a PanelMate ePro XE or X1 unit then copy to the **D:\Cfg** directory.
12. Copy the **recipefile.csv** files to the target unit to the path location specified in the **recipelist.csv** file. If copying to a PanelMate ePro XE or X1 unit then copy to the **D:\Recipe Manager** directory.
13. Test online

## Chapter 4: Using the Recipe Manager in Run Mode

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*In this chapter, you will learn:*

- *How to launch the Recipe Manager*
- *How to use the Recipe Manager in run mode*
- *About the operation log*

## Recipe Manager Launching Methods

If a **.ois** file exists in the same directory as a PanelMate configuration **.pps** file and both files have the same name then the Recipe Manager will automatically launch when the PanelMate PC Pro program launches the **.pps** file.

There are two recommended ways to launch the PanelMate PC Pro configuration:

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

Notes:

- During boot-up, there will be no messages displayed telling you that the Recipe Manager is launching.
- The Recipe Manager must be selected as the active kit when using X1 models. See Chapter 2 - Selecting the Recipe Manager on PanelMate ePro X1 Units for details.

## Using the Startup **PMStart.cmd** File to Automatically Launch a Configuration and Recipe Manager

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 Recipe Manager, 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. There are two **PMStart.cmd** files described in this manual, one for the XE models and one for the X1 models. See Appendix A for a complete listing of the **PMStart.cmd** files.

- 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 **.pps** file name with the name of your ePro configuration.

**set MY\_CFG=d:\cfg\xxx.pps**

- 6) Make sure there is a **.ois** file with the same path and file name as the ePro configuration file.
- 7) Save the edited **PMStart.cmd** file, then close Notepad.

## By-Passing the Recipe Manager

If you do not want to launch the Recipe Manager then delete the **.ois** file from the directory or rename the **.ois** file so that it does not match the **.pps** file name. If your configuration includes pages for the Recipe Manager, you will want to delete those pages also.



## Power-Up Sequence

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

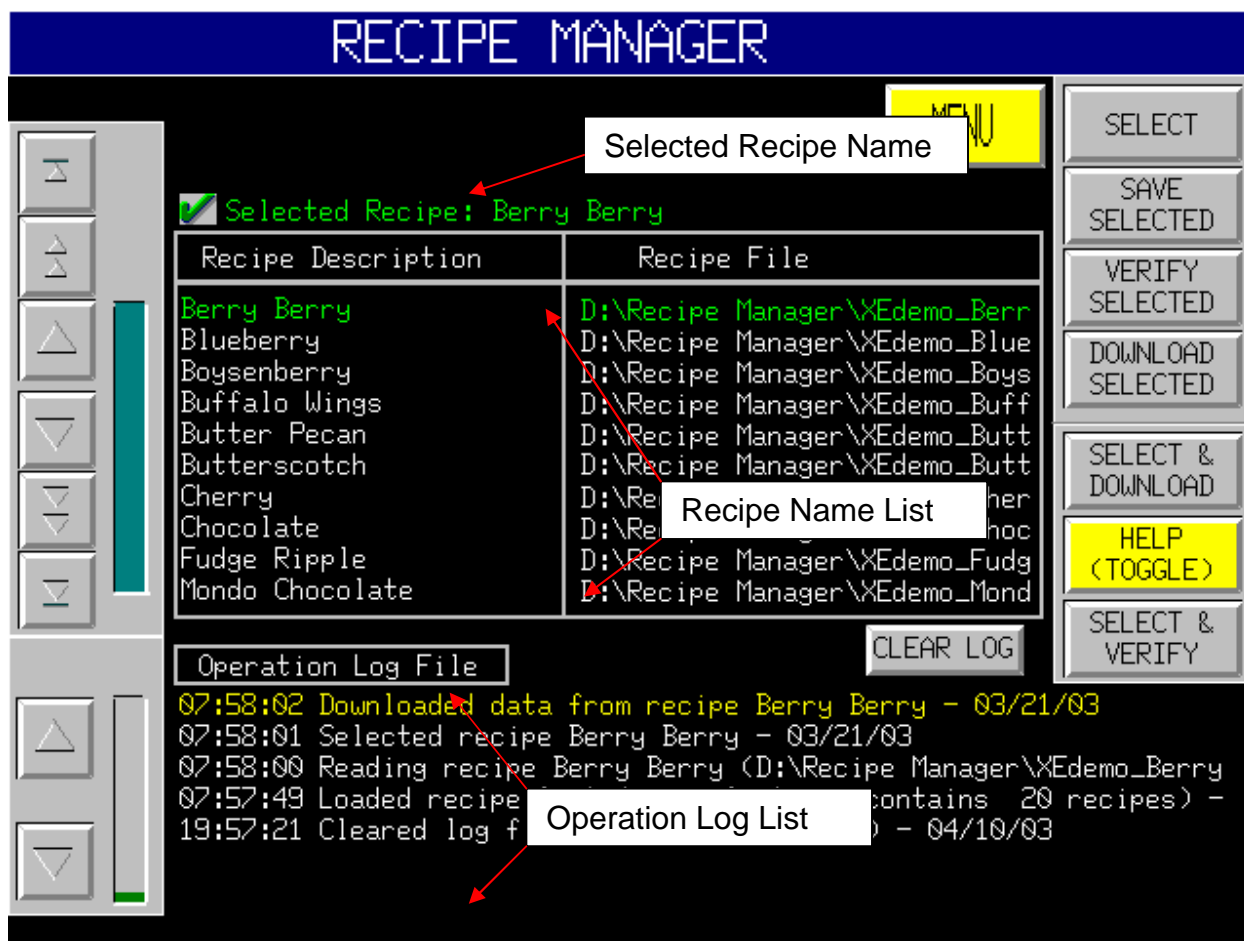
- 1) A DOS prompt appears on the screen, informing you that the unit is initializing system resources.
- 2) The Windows NT Embedded operating system boots up.
- 3) A **Delay-Connecting to Touchscreen Controller** window appears, informing you that the unit is loading the touchscreen driver.
- 4) The PanelMate PC Pro application launches.
- 5) The Recipe Manager program launches
- 6) Other applications kits launch as specified in the **PMStart.cmd** file.

## Recipe Manager in Run Mode

There are 2 PanelMate configuration pages that can be used with the Recipe Manager.



Recipe Manager Basic Operations Configuration Page (Sample Page 198)



**Recipe Manager Advanced Operations Configuration Page (Sample Page 199)**

There are 3 main areas of both Recipe Manager pages. There is the name of the selected recipe, a recipe list and the operation log list. Use the up/down scroll bars and arrow keys to navigate through the recipe list and operation log list. Highlighting will be used to focus on a recipe name or log message.

## Recipe Manager Control Buttons

The following describes the operations of the control buttons on the Recipe Manager configuration pages.

**Select** - this will take the highlighted recipe name and will make the recipe the selected or activated recipe. All actions are relative to a selected recipe. The selected recipe name will be noted. The highlighted recipe name in the list can change without affecting the selected recipe. This control button is found on Sample page 199.

**Save Selected** - this will read the data from the PLC based on the addresses listed in the selected recipe file (*recipefile.csv*). The read data will then be saved in the selected recipe file in the column 2 location where recipe values are stored. This control button is found on Sample page 199.

**Verify Selected** - this will read the data from the PLC based on the addresses listed in the selected recipe file (***recipefile.csv***). The read data will then be compared to the recipe ingredient values stored in the selected recipe file. The verify status (pass or fail) will be listed in the operation log. If the verify fails only the first mismatch will be logged in the operation log. This control button is found on Sample page 199.

**Download Selected** - this will take the ingredient values from the selected recipe file (***recipefile.csv***) and write each ingredient value to the PLC. The ingredient values are found in column 2 and the destination PLC locations are found in column 3 of the ***recipefile.csv*** file. This control button is found on Sample page 199.

**Select and Download** - this will take the highlighted recipe name, make it the selected recipe and then download the recipe ingredient values to the PLC. This does both the **Select** and **Download Selected** actions. See **Select** and **Download Selected** for more details. This control button is found on Sample page 198 and 199.

**Select and Verify** - this will take the highlighted recipe name, make it the selected recipe and then compare the recipe values with the values stored in the PLC. This does the **Select** and **Verify Selected** actions. See **Select** and **Verify Selected** for more details. This control button is found on Sample page 198 and 199.

**Clear Log** - this will erase the contents of the Recipe Manager operations log. This control button is found on Sample page 198 and 199.

## Messages Displayed in the Operation Log

The Recipe Manager operations are logged in a file called **recipemanager.log**. The file will be stored in the same path location as the **recipelist.csv** file. The following messages may appear in the operations log.

**Loaded recipe list (recipelist.csv contains x recipes)** - the recipe name list (**recipelist.csv**) file has been found and read. This automatically occurs when the Recipe Manager is launched. If no file exists, one will be created with no entries. In this case the message will say the file "...contains 0 recipes".

**Cleared log file (RecipeManager.log)** - the contents of the Recipe Manager operations log have been erased. This appears after the **Clear Log** button has been selected.

**Reading recipe recipefile (path\recipefile.csv contains x ingredients)** - the recipe file associated with the highlighted recipe has been opened and the data is being read. This is the first step in the **Selection** action.

**Cannot read recipe recipefile (path\recipefile.csv) - ERROR 3** - the file path of **recipefile.csv** is invalid. As a result the highlighted recipe will not be selected. The **recipelist.csv** file may have the recipe file specified incorrectly.

**Cannot read recipe recipefile (path\recipefile.csv) - file not found** - the file named **path\recipefile.csv** can not be found. As a result the highlighted recipe will not be selected. The **recipelist.csv** file may have the recipe file specified incorrectly or the recipe file may not be stored as specified in the **recipelist.csv** file.

**Selected recipe recipefile** - the recipe file associated with the highlighted recipe has been successfully read and is now the selected recipe.

**Downloaded data from recipe *recipefile*** - the recipe data from the selected recipe has been successfully written to the PLC.

**Verifying recipe *recipefile*** - the recipe data compare is starting. Data in the PLC will be compared with the selected recipe file data.

**Ingredient *recipeingredient* failed - (*recipeingredient* = *x*) <> (*plcaddress* = *x*)** - during the verify process an ingredient value stored in the PLC is not equal to the associated ingredient value stored in the selected recipe file. Once this message is logged, no more of these messages will be logged for the current verify operation.

**Verify passed for *recipefile*** - the data in the PLC matches the data in the selected recipe.

**Verify failed for *recipefile*** - the verify process was unsuccessful. This means that one or more ingredient values in the PLC did not match the ingredient values in the file associated with the selected recipe.

**Uploaded data for recipe *recipefile*** - the data was successfully read from the PLC based on the PLC addresses in the selected recipe file. This is the first step in the Save action.

**Writing recipe *recipefile* (*path\recipefile.csv* contains *x* ingredients)** - the process of taking the data uploaded (read) from the PLC and storing it in the selected recipe file is starting.

**Saved recipe *recipefile*** - The data read from the PLC has been successfully stored in the file associated with the selected recipe.

## Chapter 5: Troubleshooting

---



*In this chapter, you will learn.*

- *About error messages that are in the Recipe Manager operation log*
- *How to troubleshoot the Recipe Manager*

## Errors Listed in the Recipe Manager Operation Log

A problem may be easily solved by looking at the messages in the Recipe Manager operation log file. The log file is called **recipemanager.log** and it is found in the same path as the **configname.pps** and **configname.ois** files. The messages may also be printed on the screen if they have been included in a configuration page. See Chapter 3: Using Sample Files for more information.

**Loaded recipe list (recipelists.csv contains 0 recipes)** - the recipe name list (**recipelists.csv**) file could not be found so one was created with no entries. Check to make sure there is a **recipelists.csv** file in the same path location as the **configname.pps** and **configname.ois** files.

**Cannot read recipe recipefile (path\recipefile.csv) - ERROR 3** - the file path of the **recipefile.csv** file is invalid. Check the **recipelists.csv** file to make sure the recipe path name is specified correctly.

**Cannot read recipe recipefile (path\recipefile.csv) - file not found** - the file named **path\recipefile.csv** can not be found. Check to make sure that the **recipelists.csv** file has the recipe path and file name specified correctly. Also check to make sure that the file has the correct path and file name.

**Ingredient recipeingredient failed - (recipeingredient = x) <> (plcaddress = x)** - during the verify process an ingredient value stored in the PLC is not equal to the associated ingredient value stored in the selected recipe file. Check to make sure that the PanelMate is communicating with the PLC and that the recipe values are not being changed in the PLC by some other means. Also, make sure that the selected recipe is the same as the recipe that was last downloaded.

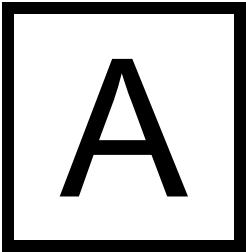
**Verify failed for recipefile** - the verify process was unsuccessful. This means that one or more ingredient values in the PLC did not match the ingredient values in the file associated with the selected recipe. Check to make sure that the PanelMate is communicating to the PLC and that the recipe values are not being changed in the PLC by some other means. Also, make sure that the selected recipe is the same as the recipe that was last downloaded.

## Recipe Manager Troubleshooting

Issue	Possible Cause	Corrective Action
No recipes show up in the recipe list area	The <b>recipelist.csv</b> is in the wrong location or does not exist	Make sure the <b>recipelist.csv</b> file exists, has the correct format and is stored in the same path location as the <b>.pps</b> and <b>.ois</b> files
Recipe Manager page does not display any data	The <b>.ois</b> file does not exist, has the wrong file name or was created incorrectly.	Check to make sure that there is a <b>.ois</b> file in the same path location as the <b>.pps</b> file and that the file names are the same.  Check to make sure that the <b>.ois</b> file is a copy of <b>RecipeManager.ois</b>
Recipe values downloaded to the PLC are not correct	1) Wrong values stored in the recipe file 2) Communications problems between the PanelMate and the PLC 3) Values being changed in PLC 4) Selected recipe is not the same recipe that was last downloaded	If the Recipe Manager verify function passed then check the values in the <b>recipefile.csv</b> .  If the Recipe Manager verify function doesn't pass then check communications, reselect the desired recipe and download values again.  Check PLC to see if value being changed after recipe is downloaded

## Appendix A: Directories and Files

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*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 units 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 (see descriptions in the next section)

#### **Cfg** (put the **.pps**, **.ois** and **recipelist.csv** files here)

XEdemo.pps	demo configuration
XEdemo.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 X1 Treeview

The following lists the treeview of the PanelMate ePro X1 units 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 (see descriptions in the next section)

#### **Cfg** (put the **.pps**, **.ois** and **recipelist.csv** files here)

DVdemo.pps	Document Viewer demo configuration
HMdemo.pps	Headline Manager demo configuration
RMdemo.pps	Recipe Manager demo configuration
RMdemo.ois	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
--------------	---

## PanelMate ePro XE PMStart.cmd File

This is the **PMStart.cmd** file that is preloaded on the PanelMate ePro XE unit in its default state. Lines will be edited for your application. See Chapter 4: Recipe Manager Launching Methods for more details. This file can be found on the PanelMate Power Pro CD (V2.21 and higher) in **PMDemos\lePro XE**

```
@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.Ink"
%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.Ink" %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.Ink" %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.Ink" %MY_BOTH%
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.Ink" %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.Ink"
goto EXIT

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

:EXIT
```

## PanelMate ePro X1 PMStart.cmd File

This is the **PMStart.cmd** file that is preloaded on the PanelMate ePro X1 unit in its default state to demonstrate the Document Viewer. In order to demonstrate the Recipe Manager change the **.pps** file name and turn the Document Viewer off by making the following changes in the file. The Recipe Manager demo files are pre-loaded onto the X1 unit.

```
set MY_CFG=d:\cfg\RMdemo.pps
```

```
set MY_DCVFile="d:\Document Viewer\none.dcv"
```

Lines will be edited for your application. See Chapter 4: Recipe Manager Launching Methods for more details. This file can be found on the PanelMate Power Pro CD (V2.21 and higher) in **PM\Demos\lePro X1**.

You will also need to make sure that the Recipe Manager is the selected kit. See Chapter 2: Selecting the Recipe Manager on PanelMate ePro X1 Units for details.

```
@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\DVdemo.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\none.hlm"
set MY_MIDHL="d:\Headline Manager\none.hlm"
set MY_BOTHHL="d:\Headline Manager\none.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)

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.Ink"
%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.Ink" %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.Ink" %MY_MIDHL%
sleep 2

```

```
:NO_MID
if exist %MY_BOTH% goto START_BOT
goto NO_BOT

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

:NO_BOT
if exist %MY_PTR% goto START_PTR
goto NO_PTR

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

:NO_PTR
goto EXIT

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

:EXIT
```



---

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# Reader Comment Card

Cutler-Hammer strives to provide quality user guides and product manuals. Please take a moment to fill out this comment card.

**Title: Recipe Manager Users Guide 01-00503-01**

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Are there enough examples?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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