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# Preface

Welcome to the Cutler-Hammer Instruction Manual For Upgrading PanelMate Configurations. This manual provides instructions for upgrading PanelMate configurations for any of the following models to newer model configurations up to and including PanelMate Power Pro:

- PanelMate I, II, III (2800)
- PanelMate I, II, III (2900)
- PanelMate Compact
- PanelMate Common Platform
- PanelMate Power Series
- PanelMate Power Pro

# About This Manual

## What's Inside

This manual is organized in the following way:

- Table of Contents
- Preface
- Required Tools
- PanelMate Upgrade History
- Hardware Upgrade
- Software Configuration Upgrade
- PanelMate I, II, III, 2800/2900 Upgrade Overview
- Software Installation
- Upload Configuration to PC
- Convert Configuration to PanelMate Common Platform
- Save Configuration to Version 2.11
- Importing Version 2.11 to PanelMate Power Series/Power Pro Editor
- Additional Information

# Required Tools

## Operating Systems

Microsoft Windows 3.1, Windows 95 or Windows 98.

**Note:** Windows NT can perform all of the actions covered in this manual, EXCEPT, it cannot transfer the DOS applications.

## Software

**Note:** The first four files listed below may be downloaded from the Cutler-Hammer website, [www.cutler-hammer.com](http://www.cutler-hammer.com). Go to “Documents and Support,” then select “Support FAQs,” then “Factory Automation Downloads,” then the “PanelMate Upgrade Tools” file. Or, you may call Cutler-Hammer Technical Support at the phone number listed under “Additional Information” on page 16 of this manual.

***Pmibm.exe*** – DOS software, provided by Cutler-Hammer, used to transfer PanelMate I, PanelMate II, and PanelMate III 2800 configurations to a PC. This software creates files with extension of *.PMx* where x is a 1, 2 or 3.

***Pm\_trans.exe*** – DOS software, provided by Cutler-Hammer, used to transfer PanelMate I, PanelMate II, and PanelMate III 2900 configurations to a PC. This software creates files with extension of *.PMx* where x is a 1, 2 or 3.

***Pmconv.exe*** – DOS utility, provided by Cutler-Hammer, used to convert PanelMate I, PanelMate II, PanelMate III, files to PanelMate Common Platform compatible format files. This utility creates files with extension of *.PCx*. The *.PCx* file is at version 2.00.

***Pmconv.exe*** – DOS utility, provided by Cutler-Hammer, used to convert a non-Cutler-Hammer configuration to Cutler-Hammer so that it can be opened in the VCP software and/or imported into the PanelMate Power Series/Power Pro software. To convert a file tagged with the Cutler-Hammer company name, go to a DOS prompt, change directories to C:\pmttools. Type in pmconv-nidt filename:extension.

***PanelMate Common Platform*** – DOS editor software version 2.11 or 2.12, provided by Cutler-Hammer, used for development of PanelMate Common Platform applications. This software is used to update the *.PCx* file from version 2.00 to version 2.11. *Note: Both version 2.11 and 2.12 create a configuration version 2.11 that will be imported in to the PanelMate Power Series/Power Pro editor. See Page 12 of this manual for detailed instructions.*

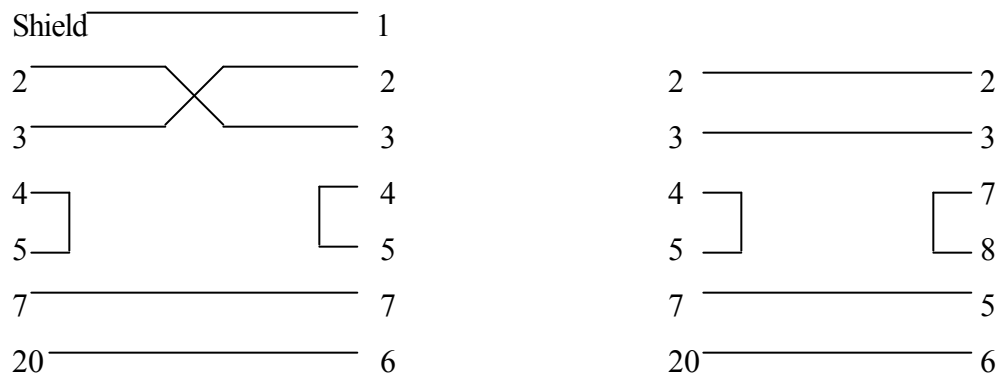
***PanelMate Power Series or PanelMate Power Pro*** – Microsoft Windows editor software, provided by Cutler-Hammer, used for development of PanelMate Power Series/Power Pro applications. This software is used to update the *.PCx* version 2.11 file to the current *.PPS* file structure.

## Serial Cables

### PanelMate I, II, III Cabling Requirements for Uploading Configuration File Using Pm\_trans or Pmibm Utility

#### Communications Cable for the Transfer/Merge Utility

PanelMate DB25P	IBM DB25S	PanelMate DB25P	IBM DB9S
Serial Port 1-Male	Serial Ports	Serial Port 1-Male	Serial Ports-Female



#### Communication Parameters

Standard parameters for communication between PanelMate and an IBM computer are:

- 8 Data bits
- 1 Stop bit
- No Parity
- 9600 Baud Rate

**Note:** Communication parameters need to be the same on both the PanelMate and the IBM system. In the PanelMate I, II, or III, the parameters are set in the PLC Name and Port Table for Port I.

# PanelMate Upgrade History

PanelMate Series	Description
PM 2800	PM I, II, III (4 Serial Ports)
PM 2900	PM I, II, III (2 Serial Ports)
PM Common Platform	PM 2000, 3000, 4000
PM Power Series	PM 1500, 2000, 3000, 4000, 5000, PMPC
PM Power Pro	PM 1100, 1700, 3000, 5000, PMPC Pro

# Hardware Upgrade

General hardware upgrade guidelines are given below. Refer to current price pages or Cutler-Hammer Technical Support for more specifics.

The leftmost column is the initial hardware. The columns to the right indicate the newer hardware platforms.

Initial Hardware Unit Description	PanelMate 2800/2900	PanelMate Compact	PanelMate Series/Common Platform	PanelMate Power Series	PanelMate Power Pro
14" Split Architecture	PM I, III, III		4210/4230	42PK..., 52PK..	5285K
14" Integrated Keypad			4510/4530	45PK..., 55PK..	5585K
14" Touchscreen				45PT..., 55PT..	5585T
10" Keypad			3510/3530, 3710/3730	35PK..., 37PK..., 39PK..	3985K
10" Touchscreen				37PT..., 39PT..	3985T
9" CRT, Keypad		2510	2410/2430, 2610/2630	24PK..., 26PK..	(Use 1785)
8" Keypad				15PK..., 17PK..	1785K
8" Touchscreen				15PT..., 17PT..	1785T

# Software Configuration Upgrade

The flow chart on the following page shows the steps required to upgrade a PanelMate configuration to a PanelMate Power Series/Power Pro “.PPS” platform. The **rounded black boxes** serve as the starting point – select the one that matches your initial configuration. Then proceed through the chart until the upgrade is completed.

The table below shows the file extensions of all PanelMate configurations. It may be necessary to refer to this table when using the flow chart on the next page.

<b>PanelMate Unit</b>	<b>Pages</b>	<b>Extension</b>
PM 2000 or PM Compact	10	.PC1
PM 2000 or PM Compact	30	.PC2
PM 2000 Color	10	.PC5
PM 2000 Color	30	.PC6
PM 3000	10	.PC1
PM 3000	30	.PC2
PM 4000	10	.PC3
PM 4000	30	.PC4
PanelMate I	15	.PM1
PanelMate II	15	.PM2
PanelMate III	30	.PM3
PM Power Series/Power Pro	10-100	.PPS



## PanelMate Upgrade Flow Chart

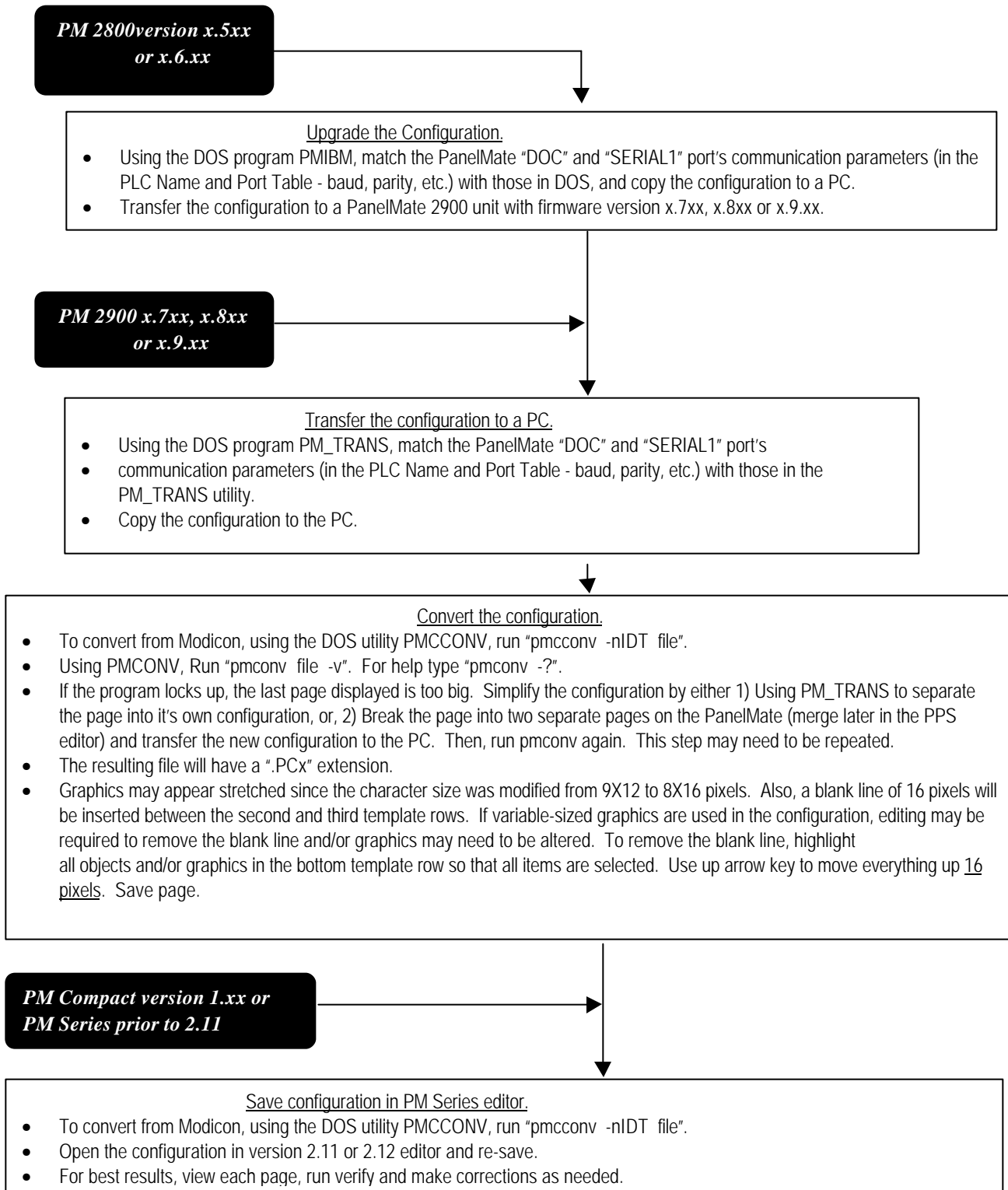


Chart continued on next page...

*PM Series version 2.11  
or 2.12*



Import into PM Power Series or PanelMate Power Pro editor.

- To convert from Modicon, using the DOS utility PMCCONV , run "pmcconv -nIDT file".
- Import configuration into Power Series/Power Pro editor.



Cleanup.

- Go through each page and clean up text and graphics as needed.
- PanelMate Power Series/Power Pro graphics should be used instead of character graphics when possible.
- Use File/Convert to convert configuration for different size PM Power Series/Power Pro units.
- If "verify" fails due to graphics outside of the page, turn on "Snap to Grid" and resave pages.

# PanelMate I, II, III, 2800/2900 Upgrade Overview

1. Install transfer software, conversion software and PanelMate Power Series or PanelMate Power Pro software.



2. Upload the configuration from the PanelMate 2800 unit using the Pmibm utility or PanelMate 2900 unit using the Pm\_trans utility



3. Run file conversion utility Pmconv.exe to convert files from .pm1, .pm2, .pm3 to .pcx where (x) varies depending on version of unit.



4. Save configuration in PanelMate Common Platform software version 2.11 or 2.12.



5. Import file version 2.11 into PanelMate Power Series or PanelMate Power Pro Configuration Software.



6. Once the file is imported, convert the file to the desired PanelMate Power Series/Power Pro model type. See the "Conversion" topic in the help file or in the Configuration Editor User's Guide.



7. Once all editing has been completed, export the configuration as a .pps file.

# Software Installation

The following procedures will install all the software required to convert the PanelMate 2800/2900 application file to a version that can be imported in to the PanelMate Power Series/Power Pro editing software. Loading instructions for the PanelMate Power Series/Power Pro software will not be addressed in this document.

## Installation of Transfer Utilities and File Conversion Utility

1. Create a folder on the root directory called pmtools.
2. Copy the appropriate transfer utility to this folder.
  - Pmibm for PanelMate 2800.
  - Pm\_trans for PanelMate 2900.
3. Copy the file conversion utility Pmconv into the pmtools folder.

Or, unzip the self-extracting zip file (pmtools.zip). This will create the directory for you.

## PanelMate Series Common Platform Software Installation Instructions

**Note:** This software CANNOT be installed from the hard drive. You must install it from floppy disks.

1. Transfer the zipped files to your hard drive.
2. Unzip the files to blank, formatted floppy disks for install.
3. After unzipping the files, the disk properties must be labeled as follows. Go to the My Computer icon and double click it, then right click the 3.5 floppy drive. Select "Properties", type in the label box the information as shown below:
  - Disk 1 label: PM A 21
  - Disk 2 label: PM B 21
  - Disk 3 label: PM C 21
4. On your PC click on your START button and select RUN.
5. Type in **a:setup idt** (if you do not type in the command line as shown you will get an error telling you to select the Private Label Name.)
6. Install the software and drivers to the default VCP directory.

# Upload PanelMate I, II, III 2800/2900 Configuration to PC

1. Connect Serial Cable (refer to Required Tools – Serial Cables) between PC and PanelMate 2800/2900 serial port 1.
2. PanelMate - plug in a XT Keyboard. Note: AT type keyboards will not work.
3. PanelMate - turn the Keyswitch to configuration.
4. PanelMate – at the Main Menu, using the arrow key, highlight Get System Utilities, then press F1 to select.
5. PanelMate – at the System Utilities Menu, using the arrow key highlight Transfer Memory, then press F1 to select.
6. PanelMate – at the Memory Transfer Menu, using the arrow key highlight Save To IBM PC, then press F1 to select.
7. PC Desktop – Go to a DOS Command Prompt and type cd\pmttools, next type pmibm or pm\_trans to run the appropriate transfer utility.
8. PC – For Pmibm select the option to Receive data from PanelMate. You must use Port I on the PC with Pmibm. For Pm\_trans, the PanelMate Transfer/Merge Utility Version 1.41 splash will appear. Press any key to continue.
9. PC – PanelMate Transfer/Merge Utility – Main Menu, using the arrow key highlight Upload Configuration From PanelMate, then press F1 to select.
10. PC – PanelMate Transfer/Merge Utility – Upload From PanelMate..., Enter the name of the file (use .PMx as an extension, x is 1,2,or 3), then press F1 to select. (The name of the file can be whatever you prefer, and cannot exceed 8 characters.)
11. PC – PanelMate Transfer/Merge Utility – Upload From PanelMate will appear. Waiting for the process to be started on the PanelMate.
12. PanelMate – Memory Transfer Menu – Press F1 to begin transfer.

**Note: The Error Message “Invalid PanelMate Product. Uploading is aborted” will appear if an improper file extension is used. The correct file extension will be in the upper left corner of the PanelMate screen when you power up in the “Configure” mode. The first number of the software version is the number required for the file extension.**

13. PC – PanelMate Transfer/Merge Utility – Upload From PanelMate, a message Configuration successfully uploaded. Press any key to continue. The application is on the PC in the pmttools directory.
14. PC – PanelMate Transfer/Merge Utility – Main Menu, using the arrow key highlight Exit To DOS, then press F1 to select.

# Convert PanelMate 2800/2900 Configuration to PanelMate Common Platform

1. From the DOS Command Prompt, type the following:

**C:\Pmtools\pmconv -v configname.pm1, 2 or 3**

**Note:** filename is what the uploaded application was named in Upload PanelMate to PC - step 10.

**Note:** If the program locks up, the last page displayed is too big. Simplify the configuration by either using PM\_TRANS to separate the page into it's own configuration, or breaking the page into two separate pages on the PanelMate. Then, run pmconv again. This step may need to be repeated.

2. The resulting file will have a ".PCx" extension.
3. Conversion to PanelMate Common Platform is completed.

# Save the PanelMate Common Platform Configuration to Version 2.11

The following procedure will open the .PCx file and resave it. This will save the application to a PanelMate Common Platform revision that can be imported into the PanelMate Power Pro editor.

1. Open the VCP folder, and double click on the PMC.exe to open the PanelMate Common Platform Configuration Software.
2. The VCP Configuration Software Version 2.11 or 2.12e2 splash will appear. Press any key to continue.
3. VCP Configuration – Product Selection Menu, using arrow keys highlight Configure PanelMate 4000 Application. Select by pressing Enter.
4. VCP Configuration – PanelMate 4000 Main Menu, highlight “Develop A Configuration”, select by pressing Enter.
5. VCP Configuration – Develop Configuration Menu, highlight “Edit Existing Configuration”, select by pressing Enter.
6. VCP Configuration – Existing Configuration Name Entry, press F1, use arrow keys to select PCx file to open, select by pressing Enter.
7. VCP Configuration – Configuration Editor Menu, highlight “Exit Configuration Editor”, select by pressing Enter. Press “Y” (yes) to save the application. The editor will prompt you for the Filename and path, press Enter. Next it will ask, “Do you want to overwrite?” Press “Y” (yes).
8. VCP Configuration – Develop Configuration Menu, press F10 to exit, F10 again to exit to main menu.
9. VCP Configuration – Product Selection Menu, using arrow keys highlight “Exit To DOS”. Select by pressing Enter.

# Importing Version 2.11 to PanelMate Power Series/Power Pro Editor

This procedure will convert the application to the current PanelMate Power Pro version. Editing of the application will not be addressed in this document, because it is covered in current product documentation.

1. From the Windows Desktop - select Start – Programs –PanelMate Software – PanelMate Power Series or PanelMate Power Pro Software
2. PanelMate Configuration Editor – click File – click Import
3. PanelMate Configuration Editor – Import dialog box, in the List Files Of Type, select (V2.11) PanelMate 4000
4. PanelMate Configuration Editor – Import dialog box, in the Directories: select C:\pmttools
5. PanelMate Configuration Editor – Import dialog box, double click on file needed for import. A Windows dialog will indicate that the version will be converted – click OK
6. The application is now in the database. Make sure the application is highlighted. Select File – Convert. A Conversion dialog box will appear. Select the desired PanelMate model. Select OK.
7. A new application should appear in the Directory tree under the selected model. You must export the configuration in order to download to a new unit.

The application is now converted to the PanelMate Power Series/Power Pro format. Please refer to current support documentation for further instructions on editing the application and downloading the application to the PanelMate Power Series/Power Pro units.

## Additional Information

For issues not addressed in this manual, please consult the Columbus Support Guide for contact information, or call 1-800-809-2772 and follow the prompts.