



# PowerVision Field Programming Kit

## *Installation and Operations Manual*

In order to consistently bring you the highest quality, full featured products, we reserve the right to change our specifications and designs at any time. The latest version of this manual can be found at [www.fwmurphy.com](http://www.fwmurphy.com).

**Warranty** - A limited warranty on materials and workmanship is given with this Murphy product. A copy of the warranty may be viewed or printed by going to <http://www.fwmurphy.com/warranty>.



Please read the following information before installing.

**BEFORE BEGINNING INSTALLATION OF THIS MURPHY PRODUCT:**

- Read and follow all installation instructions.
- Please contact Enovation Controls immediately if you have any questions.

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## Introduction

### Purpose

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The purpose of this manual is to provide instructions on using this tool as an alternative to purchasing PowerVision to load the compiled file.

The Field Programming Kit (FPK) is a free Windows PC-based program that is used to update software on PV300P, PV350, PV380, PV450, HVS450, PV780 and HVS780 displays using an ECom CAN dongle or other supported RP1210B devices.

This program does not require PowerVision in order to perform software updates on a PV3xx display.

You must have the compiled bootloader and/or application payload (\*.gciBin file) that you intend to upload.

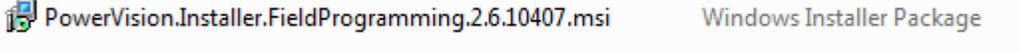
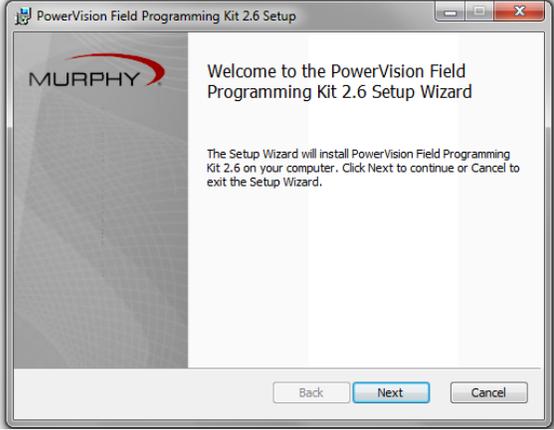
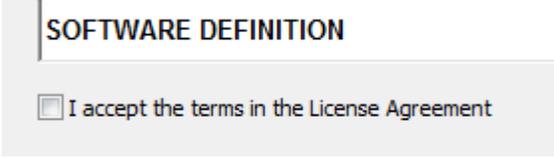
The software is freely distributable.

## Installation

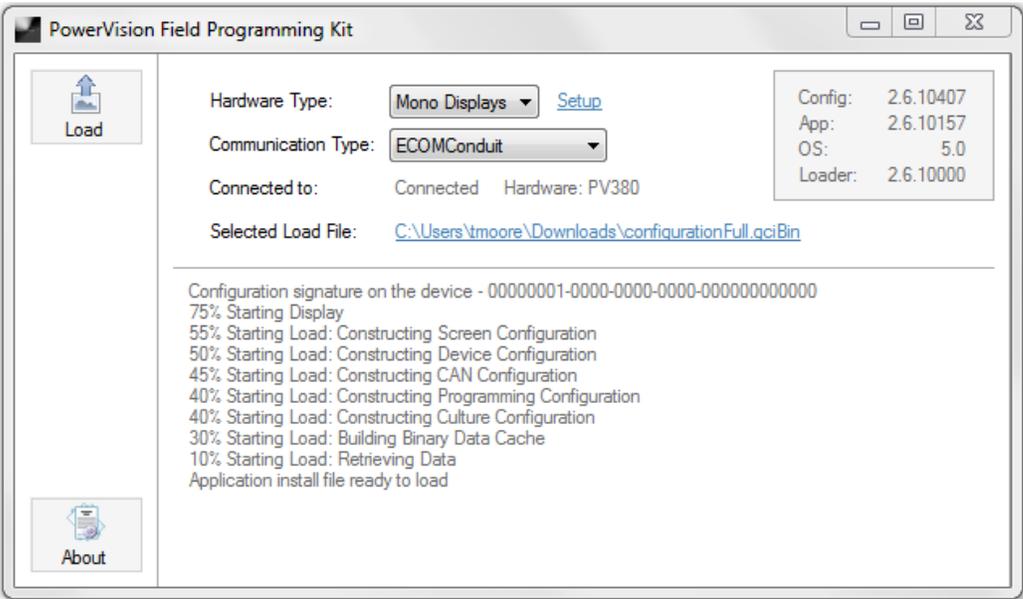
New display configuration files can be uploaded to displays by following the tool installation and connection instructions steps outlined below.

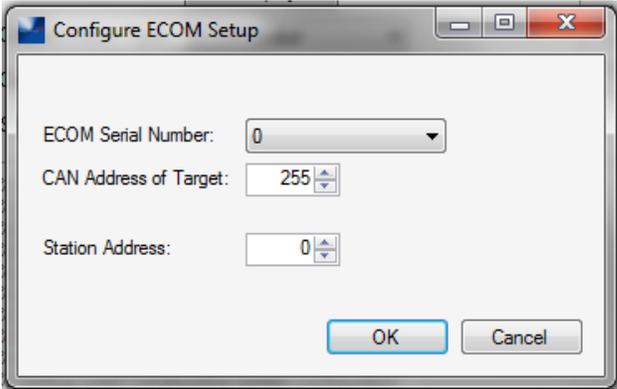
Step	Action
1	<p>If you have a Monochrome display (e.g., PV350, PV380 or PV300P) connect the ECOM dongle to the USB port and the display.</p>  <p>If you have a Color display (e.g., PV450, PV750 or PV780) connect the USB-Ethernet adapters with cross-over cable to both the PC and the display.</p> 
2	Connect the display to the harness, and turn on the power.

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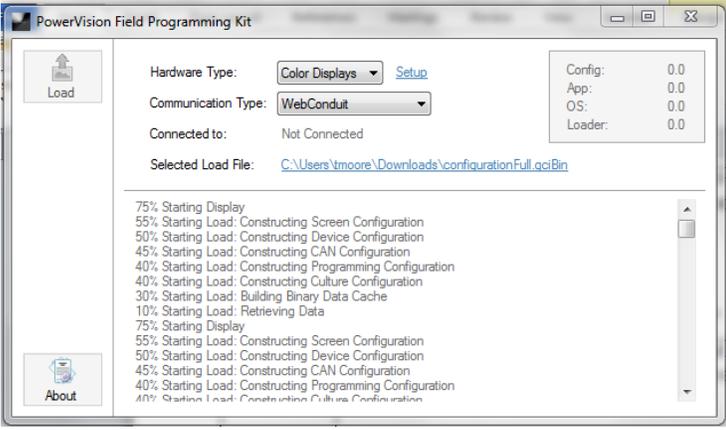
Step	Action
3	Install the ECOM device driver for a 32-bit or 64-bit Windows installation.
3a	<p>Locate this file and double click it to begin the installation:</p> 
3b	<p>The following screen will appear. Click Next.</p> 
3c	<p>The Software License Agreement screen will appear. Click the box to accept the License Agreement terms, and click Next.</p> 
3d	<p>The Destination folder screen will appear. Click Next to install in the default folder, or click Change to choose a different folder. Then click Install to begin the Installation.</p>

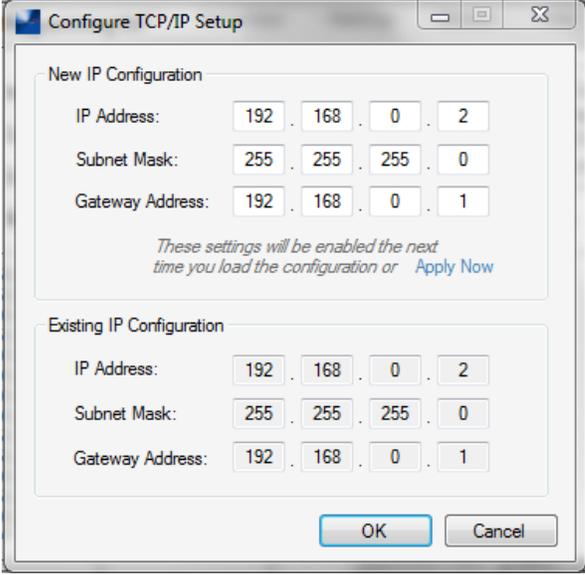
Continued on next page

Step	Action				
3e	Click Finish to exit the Setup Wizard.				
3f	Click Start, and locate/click on the PowerVision Field Programming Kit 2.6.				
3g	<p>The following screen will appear. Pick the appropriate Hardware Type from the drop down selection list (e.g., Mono Displays or Color Displays):</p> 				
3h	<p>For the Communication Type...</p> <table border="1" data-bbox="451 1350 1474 1570"> <thead> <tr> <th data-bbox="451 1350 967 1419">IF Mono Displays is chosen...</th> <th data-bbox="967 1350 1474 1419">IF Color Displays is chosen...</th> </tr> </thead> <tbody> <tr> <td data-bbox="451 1419 967 1570">Choose ECOM Conduit OR RP1210Conduit, <b>and follow steps 3i through 4.</b></td> <td data-bbox="967 1419 1474 1570">The system automatically chooses WebConduit, <b>and follow steps 5a-5e.</b></td> </tr> </tbody> </table>	IF Mono Displays is chosen...	IF Color Displays is chosen...	Choose ECOM Conduit OR RP1210Conduit, <b>and follow steps 3i through 4.</b>	The system automatically chooses WebConduit, <b>and follow steps 5a-5e.</b>
IF Mono Displays is chosen...	IF Color Displays is chosen...				
Choose ECOM Conduit OR RP1210Conduit, <b>and follow steps 3i through 4.</b>	The system automatically chooses WebConduit, <b>and follow steps 5a-5e.</b>				
Note	<p>RP1210 Conduit is a generic interface for applications involving OEM diagnostic tools typically used in the heavy-duty equipment.</p> <p>The RP1210 devices we tested are:  <a href="#">CAT Communication Adapter 3</a>  <a href="#">CAT Communication Adapter II</a>  <a href="#">Cummins Inline 5</a></p>				

Step	Action
Note:	Steps 3i through 4 are used for Monochrome displays only. Steps 5a through 5e are used for the Color Conduit only.
3i Monochrome Display Only	<p>Click on the Setup link, and the following screen will appear:</p> 
3j Monochrome Display Only	Select the ECOM Serial Number by pulling down the list. Click OK.
3k Monochrome Display Only	<p>Ensure the Communication Type is “ECOM Conduit”.</p> <p>Note: RP1210 Conduit is a generic interface for applications involving OEM diagnostic tools typically used in the heavy-duty equipment.</p> <p>The RP1210 devices we tested are:</p> <ul style="list-style-type: none"> <li>CAT Communication Adapter 3</li> <li>CAT Communication Adapter II</li> <li>Cummins Inline 5</li> </ul>
3l Monochrome Display Only	<p>Click the Selected Load File link to pick the load file. Ensure that the file type is “Firmware Files (*.gciBin)”.</p>  <p>Select the configurationFull.gciBin file and click Open (or double-click the file).</p>

Continued on next page

Step	Action
3m Monochrome Display Only	<p>Ensure the Connected to: field shows the hardware. This displays that everything is talking.</p> <p style="text-align: center;">Connected to:      Connected    Hardware: PV380</p>
3n Monochrome Display Only	<p>Click Load.</p> <div style="text-align: center;">  <p>Load</p> </div>
3o Monochrome Display Only	<p>The Caution light on the hardware will begin flashing yellow, and the progress will flash vertically on the screen.</p> <pre> Application installation ready to load 75% Starting Display 55% Starting Load: Constructing Screen Configuration 50% Starting Load: Constructing Device Configuration 45% Starting Load: Constructing CAN Configuration 40% Starting Load: Constructing Programming Configuration 40% Starting Load: Constructing Culture Configuration 30% Starting Load: Building Binary Data Cache 10% Starting Load: Retrieving Data </pre>
4 Monochrome Display Only	<p>Once the display reaches 100%, the unit will reboot, “Success” will be displayed at the top of the status list, and the gauge screen will be displayed on the unit.</p>
Note:	<p>If you chose Monochrome Display in Step 3G above, <b>stop here</b>. If you chose Color Conduit in Step 3G above, begin with Step 5a below.</p>
5a Color Conduit Only	<p>After choosing Color Conduit, this screen appears. Click Setup.</p> <div style="text-align: center;">  </div>

Step	Action
5b Color Conduit Only	 <p>Enter the appropriate IP Addresses, and click OK.</p>
Note:	<p>Ensure the Connected to: field shows the hardware. This displays that everything is talking.</p> <p>Connected to:      Connected    Hardware: PV380</p>
5c Color Conduit Only	<p>Click Load.</p> 
5d Color Conduit Only	<p>The Caution light on the hardware will begin flashing yellow, and the progress will flash vertically on the screen.</p> <pre> Application installation ready to load 75% Starting Display 55% Starting Load: Constructing Screen Configuration 50% Starting Load: Constructing Device Configuration 45% Starting Load: Constructing CAN Configuration 40% Starting Load: Constructing Programming Configuration 40% Starting Load: Constructing Culture Configuration 30% Starting Load: Building Binary Data Cache 10% Starting Load: Retrieving Data </pre>
5e Color Conduit Only	<p>Once the display reaches 100%, the unit will reboot, "Success" will be displayed at the top of the status list, and the gauge screen will be displayed on the unit.</p>

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