EZ LADDER Program Loader
OEM Setup Program 2
For M-Series or P-Series
PLC on a Chip based Targets

For EZ LADDER Version 1.1.0.0 or later

The EZ LADDER Program Loader OEM Setup Program is for OEM using PLC on a Chip Products and who need the ability to allow their customers to be able to update / download new programs and target kernels without giving the customer EZ LADDER or the actual EZ LADDER ladder diagram.

This program uses the ladder diagram's compiled (.hex / .hex2 files) created in EZ LADDER and the actual target kernel to create an executable program that can be sent to a customer. A customer with this file can update the target (PLC on a Chip) kernel and/or the ladder program based on the selections you make while creating it.

Included in the EZ LADDER Program Loader OEM Pack, you will find a Microsoft Word document (Updater Program Instructions.doc) with basic instructions (and related images) for the actual end-user customer for using the EZ LADDER Program Loader: Update Program that the OEM Setup Program creates. This document is provided to be used as is or modified as required for OEM's to provide customers with instructions. The images and instructions may be modified or replaced as desired.

System Requirements:

- Windows XP, Windows Vista, Windows 7 or Windows 8
- Microsoft .Net 2.0 Framework

Running the OEM Setup Program

1. To run the OEM Setup Program, unzip and copy all the files in the OEMpack.zip to a location on your local drive.

2. Use the **START...RUN AND BROWSE** to the OEMSetupProgram.exe and click **OK**.
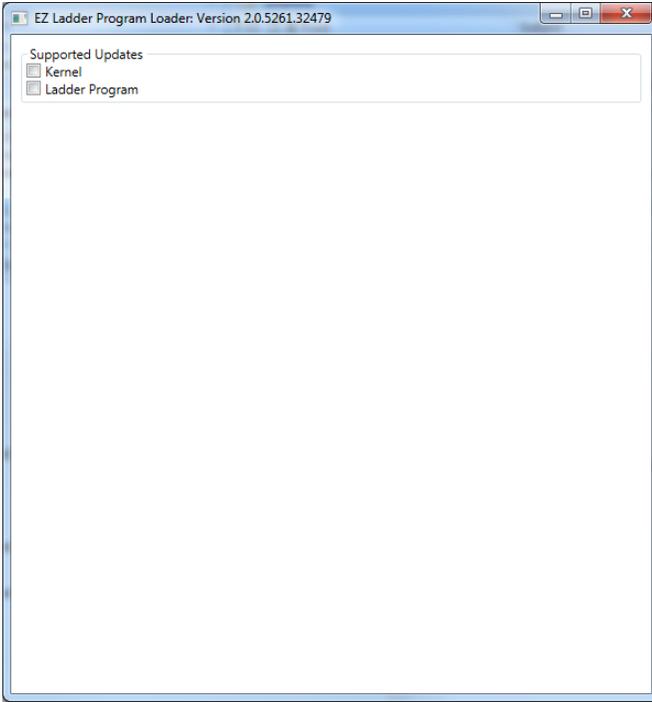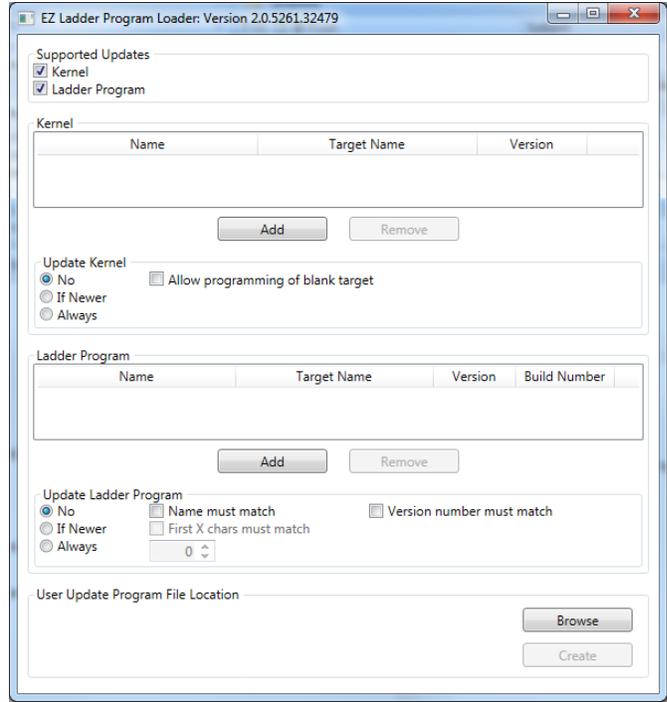
The following window will open (Figure 1):

Figure 1

Figure 2

Creating an EZ LADDER Update File for a Customer

1. With the OEMSetupProgram.exe window open, select the type of updates you want to include in the executable file that will be provided to the customer. The Kernel and Ladder Program can both be selected. Only select the updates to be included in the executable. Figure 2 shows both checkboxes selected for updating the Kernel and Ladder Program.

2. In the Kernel pane, click the **ADD** button. A window will open. Browse to the location of the kernel file to be included in the executable update file. Typically, kernel files are loaded in the *Kernel* sub-directory where EZ LADDER Toolkit is installed. Once the file has been selected, click the **Open** button. The window will close and the selected kernel file will now be shown in the Kernel section of the kernel pane. Refer to Figure 3.
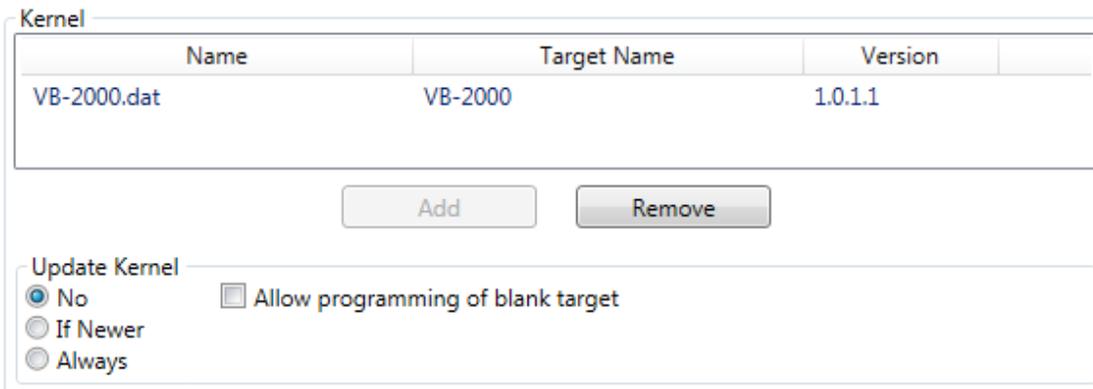

Figure 3

3. Select the Update Kernel Options. Refer to Figure 4.

No: Will not update the kernel on the target.

If Newer: Will update the kernel on the target if the kernel in the .exe file is new than the target's kernel.

Always: Will update the kernel every time.

Allow programming of Blank Target: When checked, the kernel will be installed if the target does not have a kernel installed (blank target). If no kernel is installed and this box is not checked, then the kernel will not load.
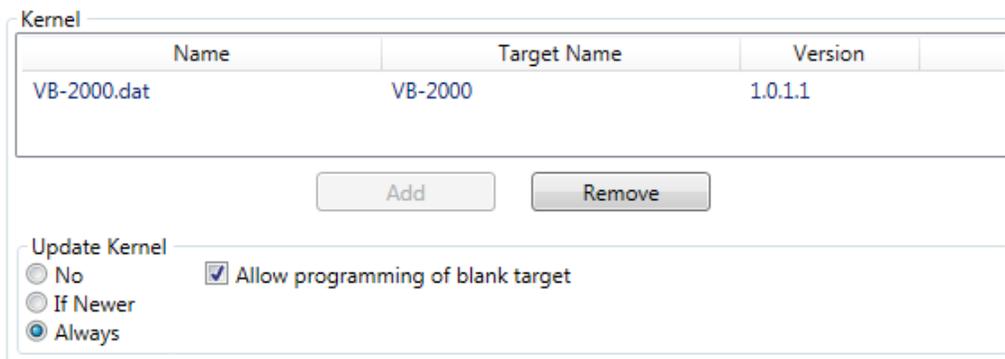

Figure 4

Kernel program targets must match or the kernel will not be updated. If the Allow programming of blank target is selected and the target is blank, there is no type check and it is possible for the incorrect kernel to be installed (if the incorrect kernel is used to create the executable update file.

4. In the Ladder Program pane, click the **ADD** button. A window will open. Click the **Browse** button to the location of the ladder diagram file to be included in the executable update file. The program must be compiled in EZ LADDER prior to this action Compiling creates a .hex and a .hex2 file in the same directory the ladder diagram file is located in (.dld). This hex and hex files are used in the creation of the User Update Program. Once the file has been selected, click the **Open** button. The window will close and the selected ladder program file will now be shown in the Ladder Program section of the kernel pane. Refer to Figure 5.
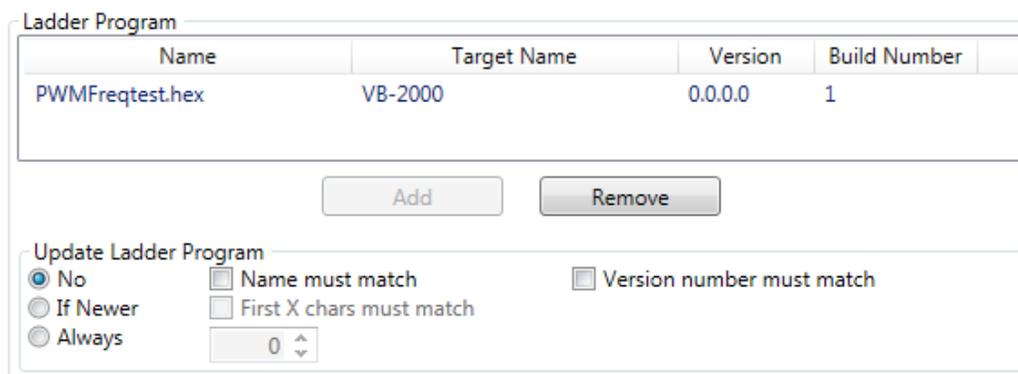

Figure 5

5. Select the Ladder Program Update Options. Refer to Figure 6.

No: This will cause the User Ladder Update program to never update the ladder program.

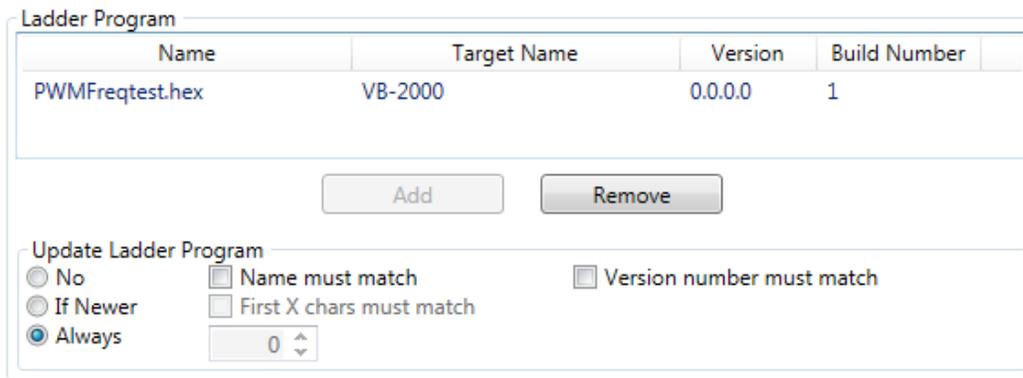| If Newer :	This will cause the User Ladder Update program to only update the the ladder program if it is new than what is installed in the target. If no ladder program is loaded, then the ladder program will be installed.
Always:	This will cause the User Ladder Update program to always update the ladder program installed on the target if the version or build number is different.
Name Must Match:	When this box is selected, the actual ladder diagram name in the User Ladder Update program and the actual ladder diagram name in the target must match to update the program.
Version Number Must Match:	When this box is selected, the actual ladder diagram version number in the User Ladder Update program and the actual ladder diagram version number in the target must match to update the program.

Figure 6

6. Select the location to store the finished User Ladder Update Program (the program that is sent to customers to update the ladder diagram and kernels in their targets). Click the **BROWSE** button in the User Update Program File Location pane. A default name is created for the file based on the versions and names of the files used to create this file. You may change the name of this file to anything you desire. Refer to Figure 7.

Figure 7

7. Click the **CREATE** button to create the User Ladder Update Program based on the selections you made in this program (window). A message will appear below the path when the program has been created. See Figure 8.
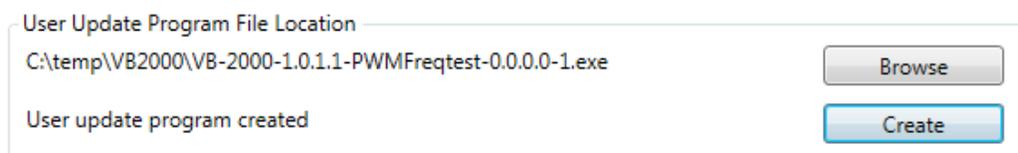

Figure 8