Variable Picture Application

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Introduction

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System Requirements

The following system requirements must be met in order to run the Variable Picture Application:

1. P200 control

2. THINC API (Lathe or Machining Center) v1.9.1 or greater

3. Knowledge of whether the control is for a lathe(L) or a mill(M).


Note: Not all versions of THINC API are currently supported. If you receive an error while running this application, please contact Caron Engineering. We can provide a plug-in to enable support for you version of THINC API.

Overview

The Variable Picture Application (VPA) provides the user with the ability to automatically display any picture, in .JPG format, on the user screen by setting a variable in the part program. The purpose is to allow the part programmer to provide helpful images to the operator while the program is running. The user simply associates a picture to a numerical value and then when the pre-defined macro variable is set to that value, the picture is displayed. Only one picture at a time can be displayed and the program remembers both the size and location of each picture so that each time the part program calls an image it is in the same place and of the same size as the last time. This application is freeware and given to the THINC Developers Group to distribute as they see fit.

Installation

Determine whether you have a P200L or P200M control. Double click on the InstallVariablePicLathe.bat if you have a P200L and click on InstallVariablePicMill.bat if you have a P200M control to begin installation
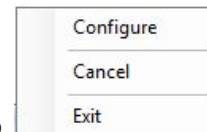
Follow the steps provided in the Setup Wizard
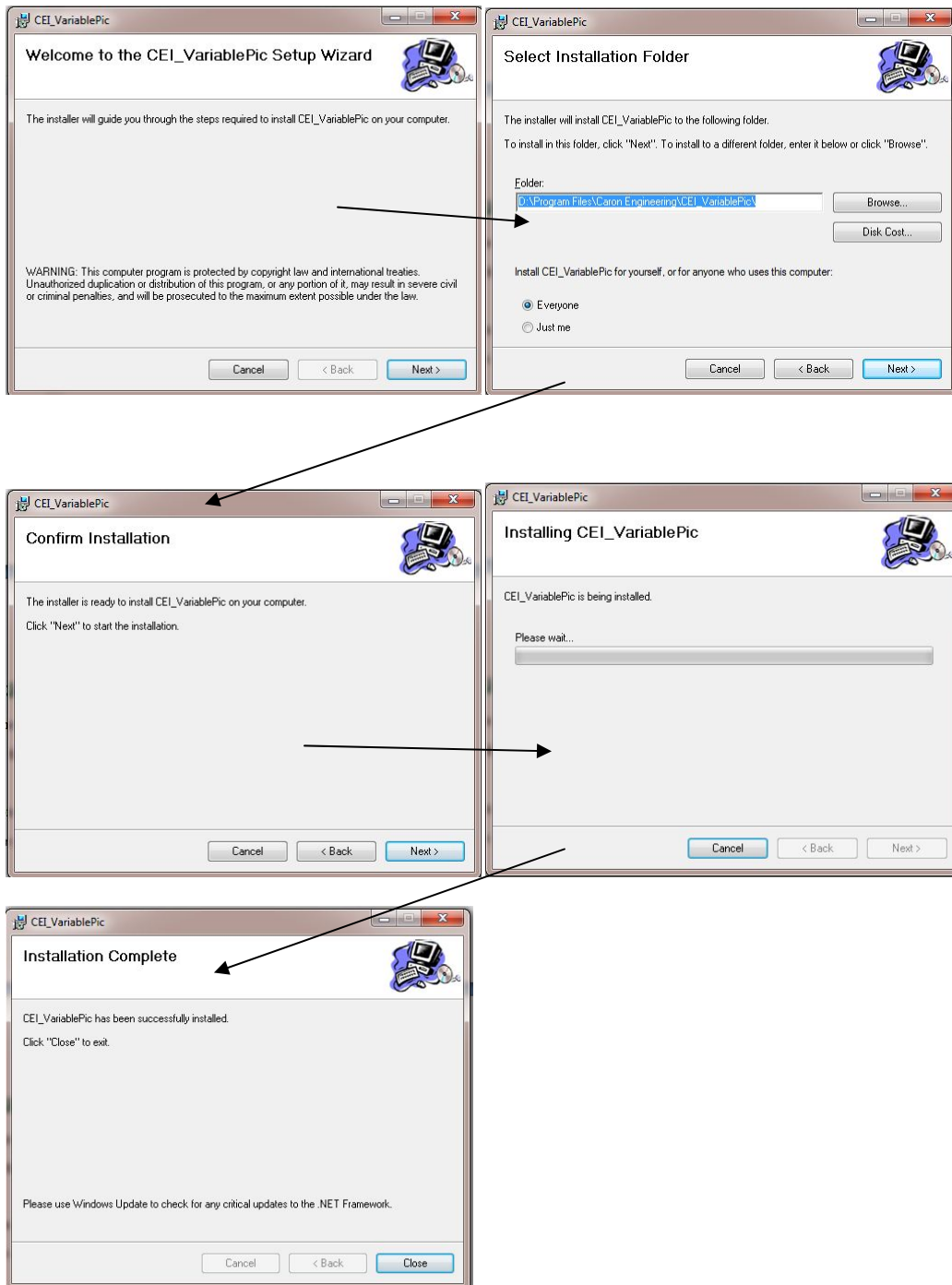
User Guide

System configuration

To launch the application go to Start – All Programs – CEI_VariablePic Folder – and double click the CEI_VariablePic icon. The application will start and an icon will appear in the tray on
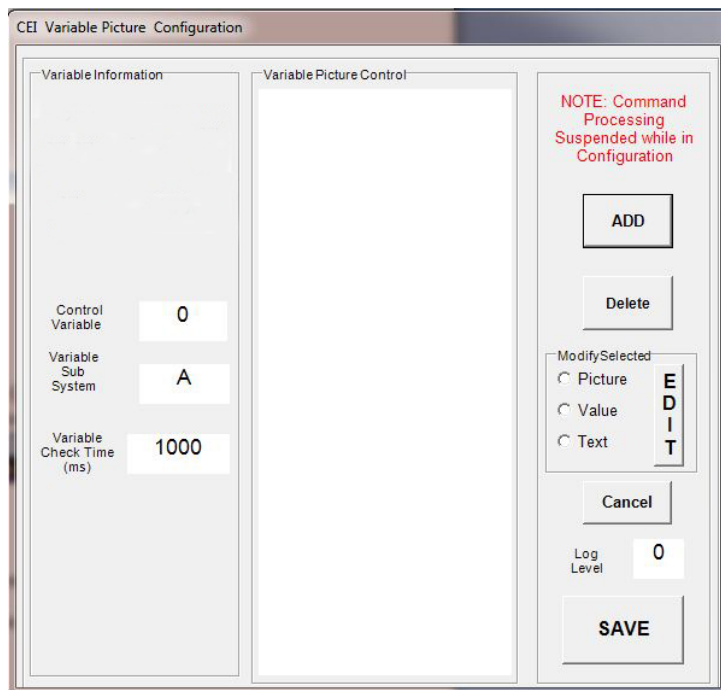
the lower right corner of the screen.

Double click the icon in the tray and the following screen pops up

Cancel puts this screen away. Exit stops the application and exits, removing the icon from the tray.

Selecting configure brings up the following screen:

This screen is used to set up the application for use with the CNC control and to configure which pictures will be displayed. There are several fields that usually only need to be set once.

The following parameters configure the software

Control Variable	177

The **Control Variable** is that one that will be monitored to determine which picture to display. If this variable is set to 0 then no pictures are displayed. If it is set to a value that is associated to a picture then that picture is displayed. This variable can be set to any number as long as the control has a valid common variable for this number. Care should also be taken that this variable isn't used by another application or the part program for another function.

Variable Sub System	A

The **Variable Sub System** is only used for twin spindle machines. Any other machine uses the same set of common variables for each turret.

Variable Check Time (ms)	500

The **Variable Check Time** is how often the control variable should be checked. This variable must never be set to a value lower than 100 milliseconds. A lower value will make the pictures appear more quickly but will impact the bandwidth of the control. Typically a 1000 Msec (1 Second) is a good value.

The remaining part of the configuration screen defines how to associate a picture to a value in the control variable. It will also allow the picture to have a message in the status bar of the picture. The main screen for this setup is below. *NOTE: When this screen is visible the variable is not read and no pictures are displayed. Make sure that you click the SAVE button after completing any edits.*
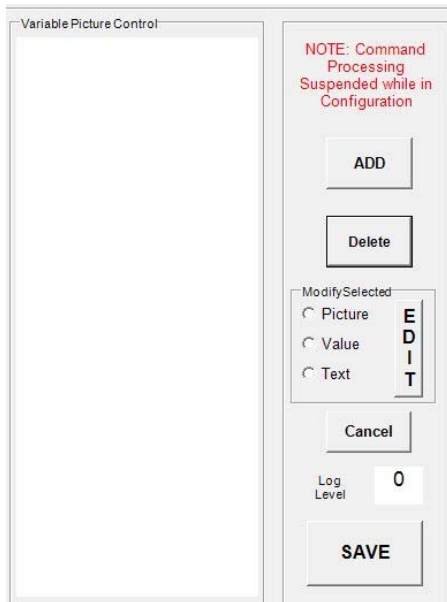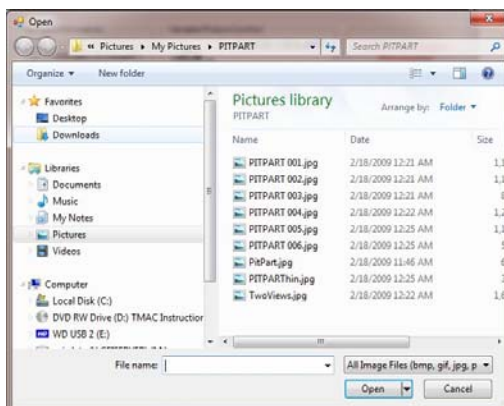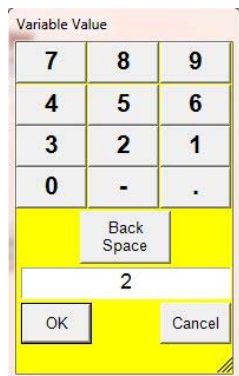

Adding a picture:

To add a new picture, click the ADD button.
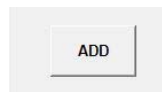
Once clicked the file view screen will appear and allow you to browse for the picture file that you want to display.
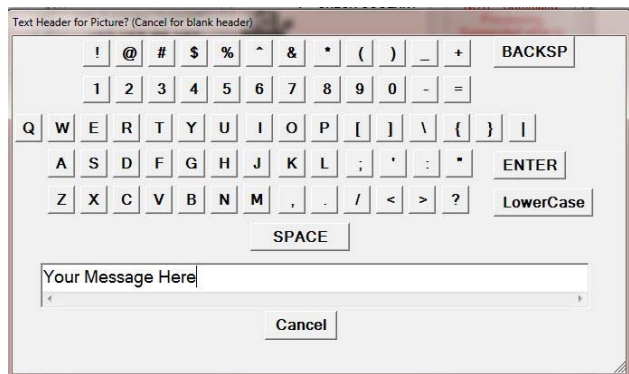
Simply browse to the picture file that you want and click Open or double click the picture. Only .JPG files are accepted as valid picture files. Once the picture is selected, the following screen appears asking for the value of the control variable that will cause this picture to display:

This value will be used to launch this picture. As an example, if the control variable is set to 177 as in our above example, and the value of 2 is keyed in for this picture, then in the CNC program the line would be V177=2 (for a lathe) or VC177=2 (for a mill). This line of code would cause the picture associated with this value to display.

Text can also be added to the top of the picture. After entering the variable value, the next screen will allow you to add a text message.

The test message typed in here will be displayed at the top of the picture.

The following is and example using the data entered above:

Notice that the control variable and its current value is also displayed

The picture location and size can be modified. To change the location, simply drag the picture to the desired location on the user screen by clicking on the top status bar. To resize the picture, just place the cursor on any corner and when the double arrows pop-up if you click on the corner it can be moved to anywhere on the screen. Once a picture has been moved and/or resized, these changes will be used when that picture is called up. The following example shows a setup with (4) pictures.

This example shows 4 pictures. The variable value is set to 1 for the first picture, 2 for the second, 3 for the third and 4 for the fourth. Each picture has a message that will be displayed. If the control variable V177 is set to 3 then this picture will be displayed and the caption CHECK PART CLAMPING will appear in the status bar.

Editing/Deleting any picture:

Any of the listed pictures can be edited or deleted. To delete a picture, simply select the picture

to highlight it and click on the Delete button . If a picture was deleted by mistake, click on Cancel to exit the configure screen and the edits won't be saved.

To edit a picture click on the picture to highlight it and then choose either Picture, Value or Text
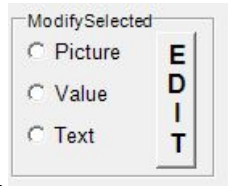
in the Modify Selected box.

Only one can be edited at a time. If Picture is selected, when the EDIT button is clicked, a new file view will pop-up to allow the selection of a new picture. The variable value and text will not change. The same is true if Value is selected. The keypad pops up and a new value can be entered.   Finally the Text can be edited in the same manner. Selecting Text and the clicking on EDIT will pop-up a new Text message keyboard. As with the picture and Variable, only the selected property will be changed. If the changes are not desired, the CANCEL button will exit without saving changes.

Log Level:

Log Level is a special tool used to determine problems with machine communications. If service is require you may be requested to change the log level to determine the problem. This is very rarely used and would only be used under the direction of Caron Engineering.

Customer Support

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