# QUBICA AMF

# CENTURY PROGRAMMER

## for Windows®

*QubicaAMF's Lane Machine Program Development System for Windows®*

FM-0060 Revision F
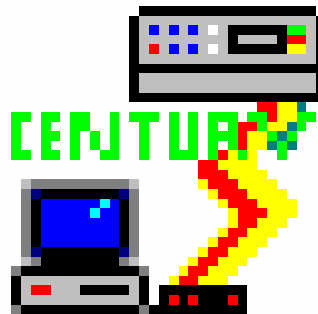
# Century Programmer

## for Windows®

# Century Programmer
## For Windows® - P/N FM-0060
## Rev. F

## Summary of Changes

| Change No. | ECR No. |
| --- | --- |
| | |

## List of Effective Pages

| Page | Change No. | Effective Date |
| --- | --- | --- |
| All | Original | 07/12/2007 |

# Contents

# Introduction

Century Programmer™ is QubicaAMF's Lane Machine Program Development System for Windows® for use with 100% IBM® compatible PCs. Use this software and your computer to create, modify, view, download, upload, and store lane conditioning programs for use with your QubicaAMF programmable lane machine. This user's guide is intended to help you install Century Programmer™ on your system, teach you how to use Century Programmer™, and provide a written reference that can aid in using Century Programmer™.

## System Requirements

- Microsoft® Windows® version 3.1 or higher
- VGA color display
- Mouse
- EEPROM version 3.18 or higher in your lane machine

## Before You Begin

This document does not cover Windows® operations, nor does it cover the details of lane conditioning or the details of how to use your QubicaAMF lane machine's programmable control. For information on installing Windows®, see your Windows® documentation. If you are unfamiliar with the use of, or the terminology associated with, the various features of your Windows® operating system, review Chapter 3 of this manual before proceeding.

To install Century Programmer™, follow the instructions in the *Installing Century Programmer™* section of this manual.

## Symbols and Conventions

Century Programmer™ documentation uses a few special symbols and conventions, which are discussed below, to help you distinguish between keys you press and text you type. You can use the mouse or the keyboard for most actions in Century Programmer™. Whenever possible, instructions are provided for both the mouse and the keyboard.

- Words within brackets <> are the names of selectable menu items and drop-down buttons that you can click on with your mouse or are the names of keyboard keys to be pressed to initiate an action, to view a screen, or to bring up a dialog box.

- Words in *italics* are <u>references</u> to the names of screens, dialog boxes, keyboard keys, drop-down buttons, etc. **that do <u>not</u> require any user action such as clicking on them with the mouse.**

- Words within quotation marks ("") are words that must be typed on your computer's keyboard. Type these words exactly as shown, including spaces and punctuation marks, if any. Type only what is within the quotation marks, but do not include the quotation marks themselves.

## The Keyboard

The keys on your keyboard may not be labeled exactly as they are in this manual. All keyboard key names are shown using capital letters. For example, the Control key is shown as **CTRL** and the Escape key is shown as **ESC.** An instruction to press the escape key is shown in brackets as – Press **<ESC>**. An instruction referencing the escape key is shown in italics as – The *ESC* key can be used to exit a dialog box and return to the main program screen.

## Product Support

If you have a question about Century Programmer™, first consult this user's guide. If you cannot find the answer to your question, contact QubicaAMF Customer Service at 866-460-7263.

If you call, you should be sitting in front of your computer with Windows® running Century Programmer™. You should have this manual at hand, and you should be ready to provide the following information:

- The version number of Windows® and the version number of Century Programmer™

- The type of hardware you are using, including network hardware

- A description of what happened and what you were doing when the problem occurred

- The <u>exact</u> wording of any message that appeared on your computer's screen

## Installing Century Programmer™

1. Start Microsoft® Windows®.

2. Insert the Century Programmer ™ cd into the cd tray of your computer and then close the tray.

3. The installation procedure will automatically start. If it does not start automatically, browse to the appropriate letter drive for the cd and double click on SetupCPW31T.exe. This will start the installation procedure for you.

**Note:** There might be a noticeably long pause while the program is gathering the needed information about your system. **Figure 1-1** shows a picture of the screen that will be displayed during the initial setup sequence.
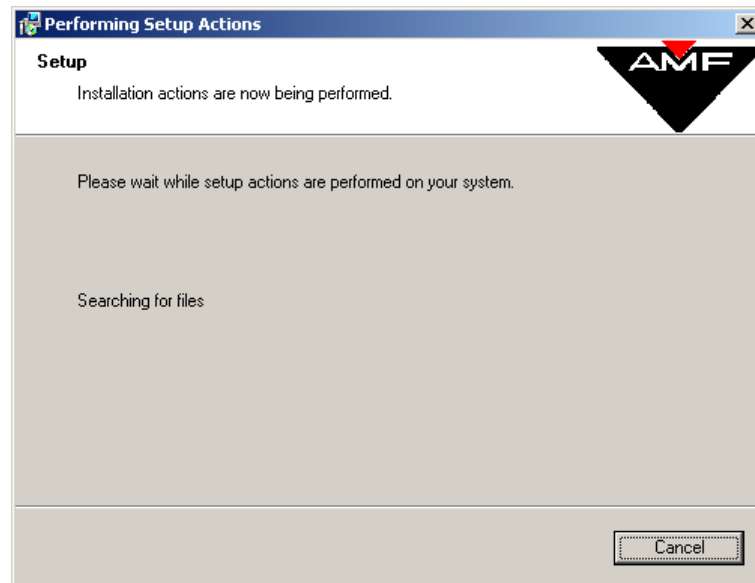


**Figure 1-1**

4. The welcome screen in **Figure 1-2** displays basic greeting information. Click on the <**Next**> button.
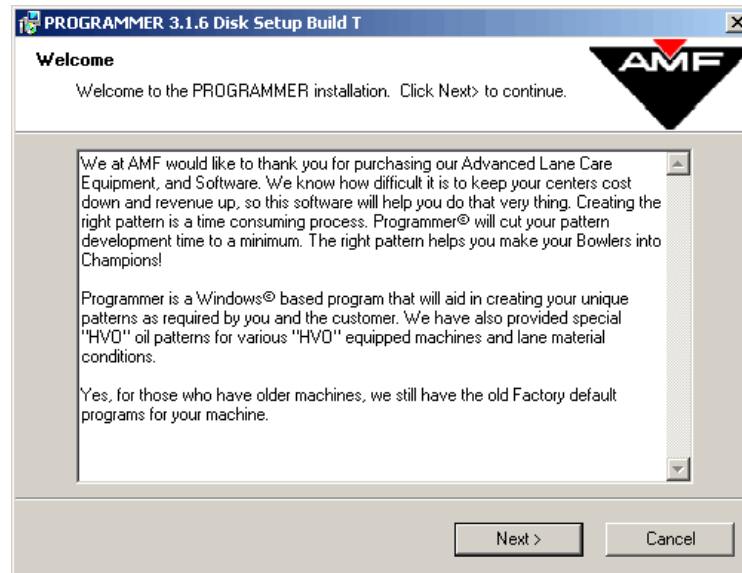


**Figure 1-2**

5. There are two different choices for installation as seen in **Figure 1-3**. For the purposes of this manual, the Standard Setup will be used. Make sure Standard Setup is selected and click the <**Next**> button. If using the Advanced Setup, select the radio button next to it and then click the <**Next**> button. The Advanced Setup requires the use of a specific password to allow the program to continue installation. If the password is not entered correctly after three attempts, the installation will end.
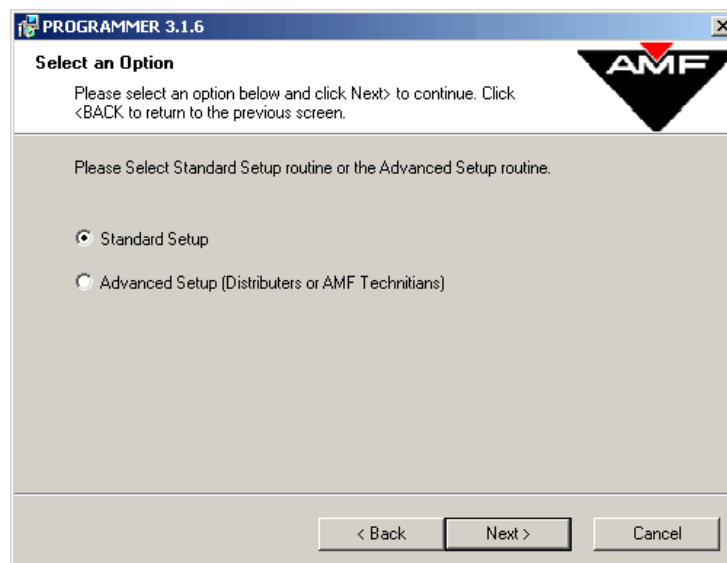


**Figure 1-3**

6.  The next screen displays the information for insuring that Adobe Acrobat Reader is installed on your computer. If you have version 4.0 or lower currently installed, please install the free Reader available on the cd. **Figure 1-4** shows the information about Adobe Acrobat Reader. Click on the <**Next**> button.
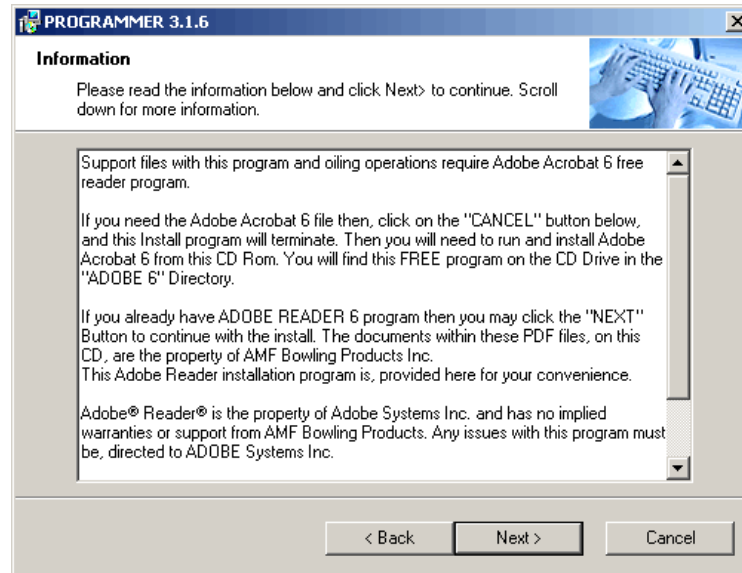


**Figure 1-4**

7.  The screen that follows displays copyright and general information about installing the program properly (**Figure 1-5**). It is advised that all Windows programs currently running should be closed before proceeding any further in the installation. Once this has been done, click <**Next**>.
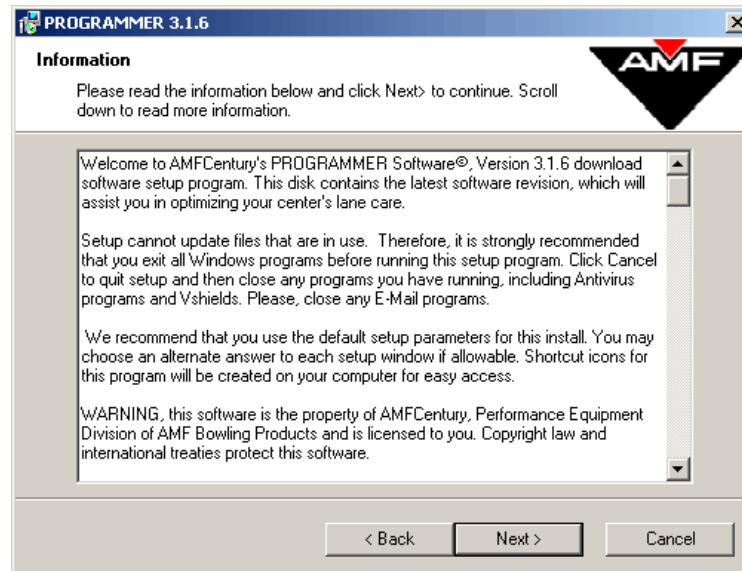


**Figure 1-5**

8. There are several different files that can be installed that are for fluid monitoring and oil consumption. These files require the use of Adobe Acrobat Reader 5.0 or higher which is included on the cd. It is recommended that all of the checkboxes remain checked for this part of the installation as shown in **Figure 1-6**. Click the <**Next**> button.
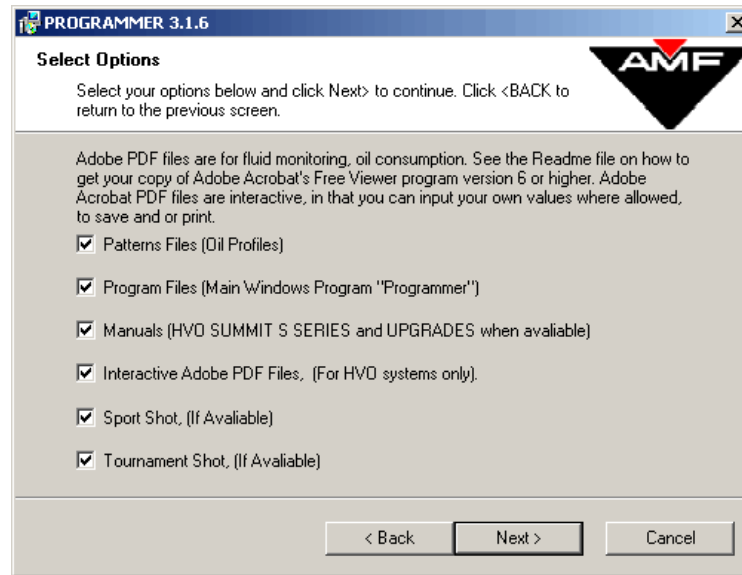
**Figure 1-6**

9. At this point, you must choose which type of lane machine is being used. The default selection is the first item which includes the HVO Summit S Series as shown in **Figure 1-7**. Make any changes if necessary and click on the <**Next**> button.
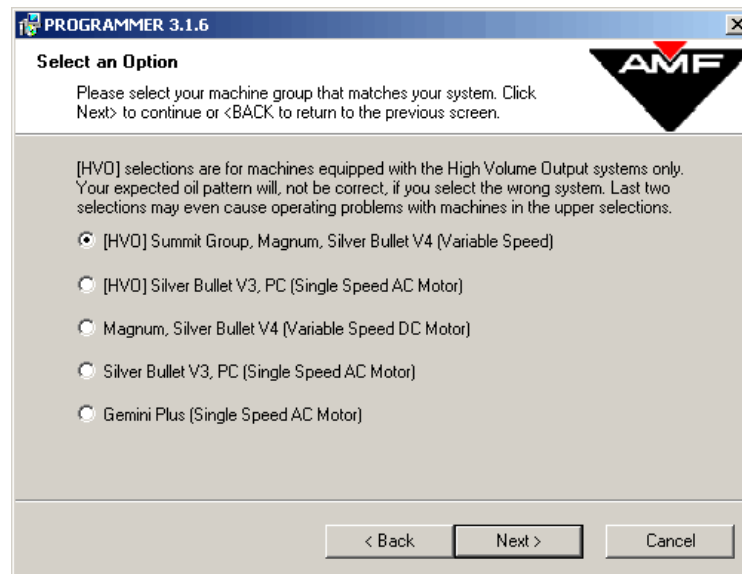
**Figure 1-7**

10. **Figure 1-8** shows the different machines that fall under the default selection for **Figure 1-7**. The default for **Figure 1-8** is the HVO Summit S Series and is shown below. Make any changes if necessary and click on the <**Next**> button.
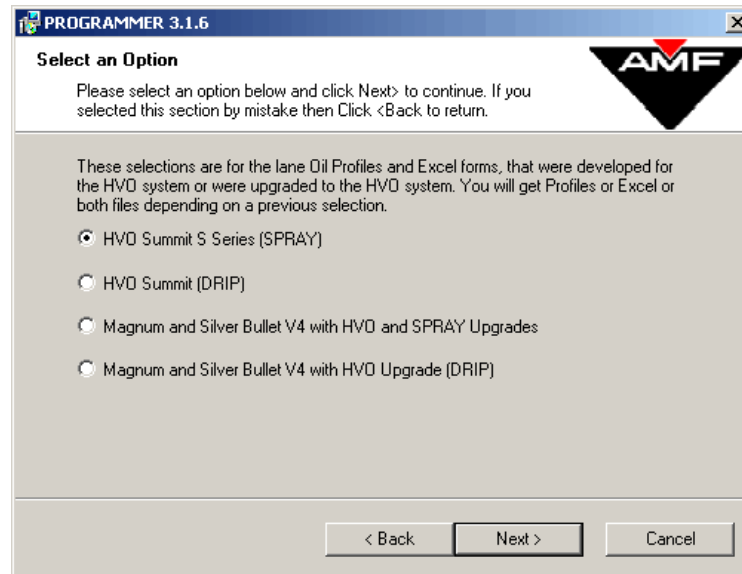
**Figure 1-8**

11. The next set of options asks for information about your lanes. Choose the option that best fits the lanes that you have. The Factory Default is already chosen for you as shown in **Figure 1-9**. Choosing Factory Default yields the same installation results as choosing Domestic Synthetic Lanes and should only be used if you are unsure what lane type you have. Your choice can be changed by reinstalling the program later if needed. Once the appropriate selection has been made, click on the <**Next**> button.
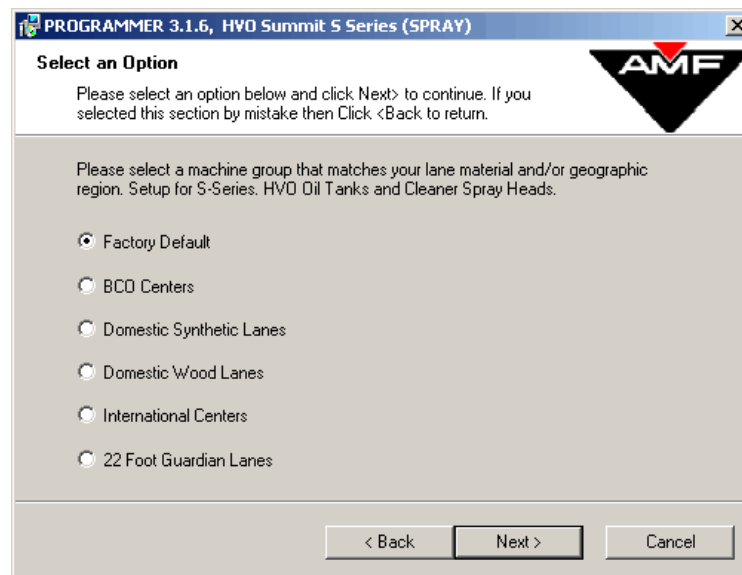
**Figure 1-9**

12. The next set of options allows you to specify which manuals that you would like to have loaded to your computer (**Figure 1-10**). All of these manuals require Adobe Acrobat Reader 5.0 or higher which is provided for you on the cd if needed. By default, all the manuals will be loaded on the computer unless unchecked. It is recommended to keep the default settings and click on the <**Next**> button. Refer to the manuals included with your lane machine for the most recent information.
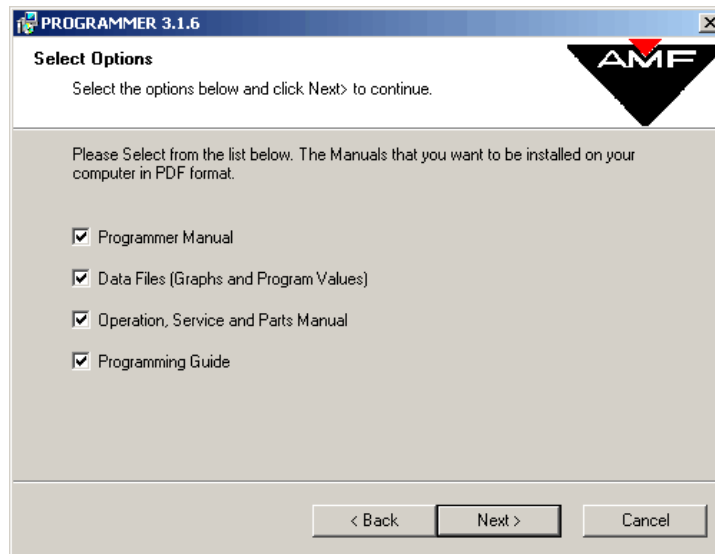


**Figure 1-10**

13. **Figures 1-11, 1-12, 1-13**, and **1-14** show screens that have text boxes to type in basic information about your bowling center. Please fill in each box with your information and click the <**Next**> button after each screen is complete.



**Figure 1-11**

**Figure 1-12**



**Figure 1-13**

**Figure 1-14**

14. The next section of options asks for a location to install the program and supporting files. The default location is shown in the textbox in **Figure 1-15** but may be changed either by typing a new location or using the browse button. Click the <**Next**> button to proceed to the next step.



**Figure 1-15**

15. **Figure 1-16** shows the folder location into which the program will place shortcut icons. The default folder is listed in the textbox and is recommended as the location for the shortcuts. Click on the <**Next**> button to continue.
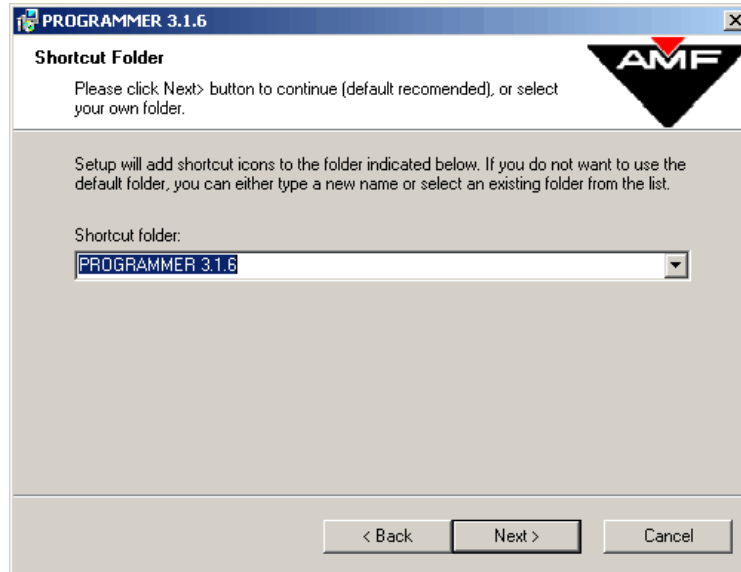


**Figure 1-16**

16. The computer now has enough information to complete the installation process. Click on the <**Install**> button as shown in **Figure 1-17** to finish the installation.
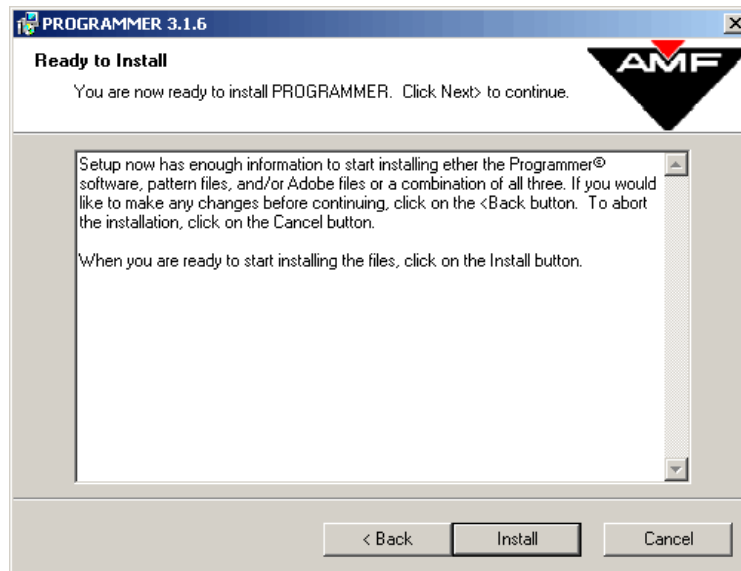


**Figure 1-17**

17. Century Programmer<sup>TM</sup> is now installed on your computer. The screen in **Figure 1-18** shows an address and phone number that are used for software registration. Once you click the <**Finish**> button, a notepad will open with information that needs to be sent to QubicaAMF. You may choose to send it either by fax or by mail.
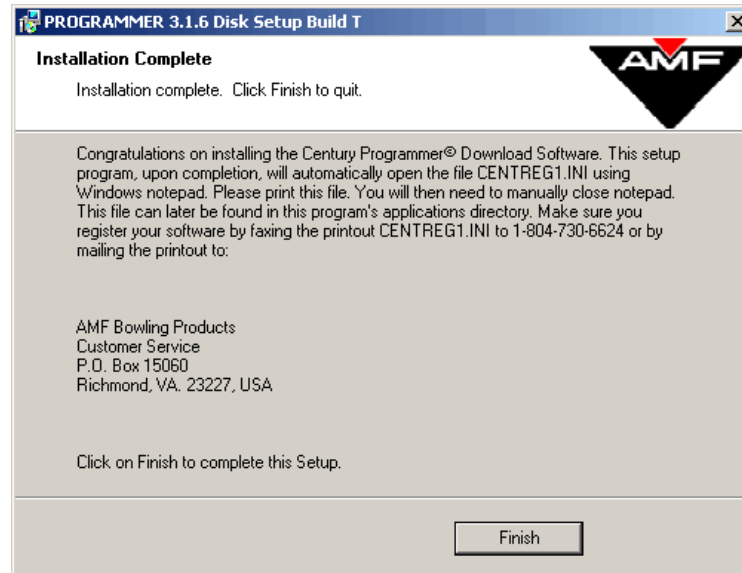


**Figure 1-18**

18. **Figure 1-19** shows an example of the registration information that comes up on the screen after clicking the <**Finish**> button mentioned in step 17. Please print out your file that opens up so you can fax it or sent it through the mail to QubicaAMF (If you do not have a printer installed on the computer, save the file to a floppy disk and print it from one that does).
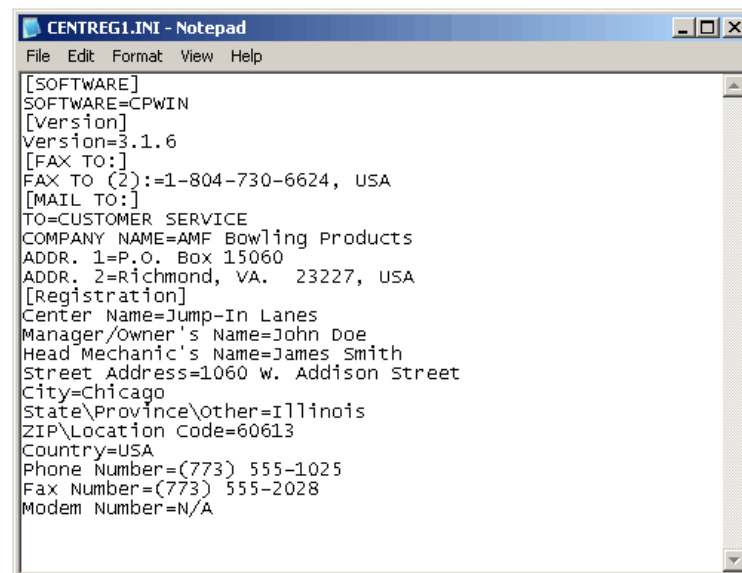


**Figure 1-19**

## Using Century Programmer™

This chapter will walk you through the features of the Century Programmer™.
Note: some screens may appear somewhat different than those presented here
depending on the version of Windows® you are using.

### Opening a Data File

Start Century Programmer™ by clicking <**Start**>, <**Programs**>, <**Programmer
3.1.6**>, <**Programmer 3.1**>. The following initial screen will appear.
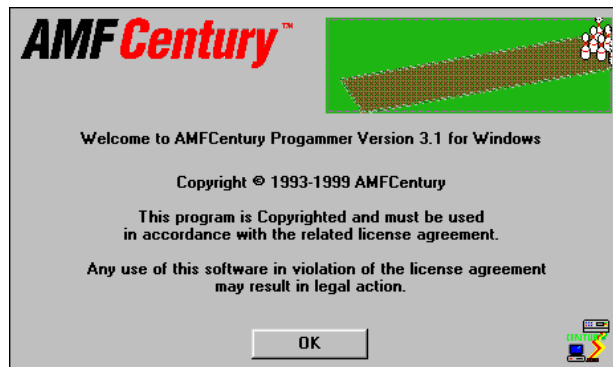


Press <**ENTER**> or click on the <**OK**> button.
The following screen will appear.
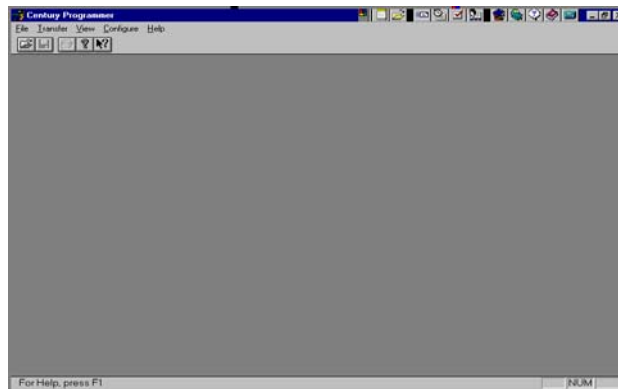


The information that makes up the lane machine's programs is stored in data files.
Century Programmer ™ provides a set of 20 lane conditioning programs that can be
customized by the user and saved under different filenames.  In order to begin
working with programs for your lane machine, you must open a data file.  To select a
program data file, click <**File**><**Open**>.  The *File Open* dialog box will appear as
shown on the next page.
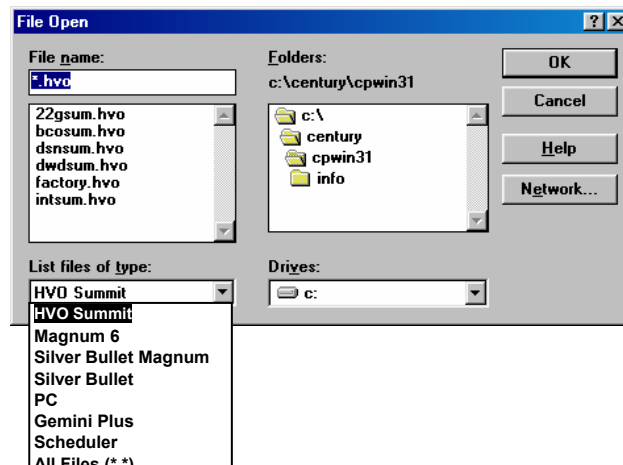
If necessary, click on the drop-down arrow button at the right of the *List files of type* box and choose the appropriate machine type by clicking on the corresponding item on the list. Silver Bullet® Magnum users should choose either <**Silver Bullet Magnum**> or <**Magnum 6**>, as applicable. The *Magnum 6* file is designed for use with <u>Magnum</u> lane machines equipped with version 8.0 or higher operating software, which allows for individual oil tank control.

After making your selection from the list, you are presented with a list of one or more files that are specific to the machine you have selected. Click on one of the filenames (such as *factory.hvo*) in the large *File name:* box. This action causes the file to be selected and listed in the small *File name:* box, and allows you to open the file. This file (*factory.hvo*) is a *program data* file and contains the 20 factory-supplied lane conditioning programs. The other files in the list, if any, each contain up to 20 lane conditioning programs that have been designed to address specific conditions you may encounter in your bowling center. These files are read-only files, and you will not be able to save changes to them. In order to save any changes, you must save them using a new filename. This will preserve the original factory-supplied files.

Click on the <**OK**> button to open the file. A screen similar to the one shown below will appear.
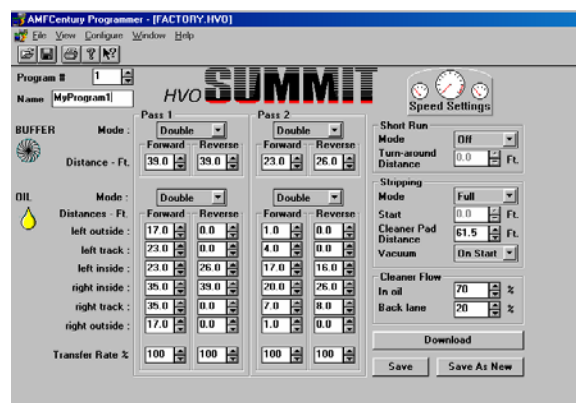
This is the *HVO Summit* program work screen for lane conditioning program #1. Each of the 20 programs can be displayed by Century Programmer™ as shown on the previous page.

The work screen is somewhat different for the PC™, Gemini Plus™, Gemini Silver Bullet®, and the Silver Bullet® Magnum with version 7.x operating software. The examples in this guide show screens associated with the *HVO* Summit. The screens associated with the Silver Bullet® Magnum with version 8.0 operating software are similar to the Summit's. While not all lane machines have all of the features discussed here, these program work screens contain all of the features that are common to the other QubicaAMF lane machines.

## Introduction to the Work Screen

Each work screen represents an individual lane conditioning program. There are basically six parts to the work screen:
- Current File and Program Identifiers
- Buffer and Oil Settings
- Stripping and Cleaner Flow Settings
- Short Run Settings
- Speed Settings
- Download and Save Section

## Selecting a Program to be Edited

The first area of the work screen to address is the Current File and Program Identifiers section, shown below.
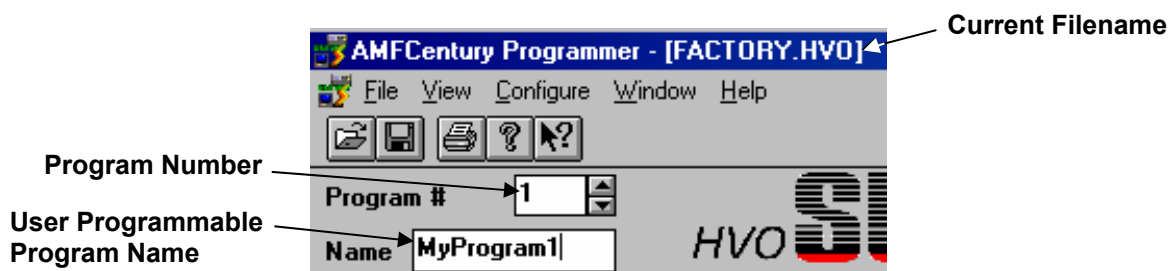


For this example, the current file is *FACTORY.HVO*. The current program is displayed in the box below the Toolbar buttons, and in this example is Program #1. The current program number can be changed by clicking on the <**Up>** or <**Down** > arrow to the right of the program number or by highlighting the number and entering a new number from your computer's keyboard.

For HVO Summit machines, there is a *Name* box below the *Program #* box. The *Name* box is initially empty. You can click inside this box and then type in a

descriptive program name to help you identify this program from others.  When you print this file, the name that you give it will also show up on the data sheet.  As stated previously, the files provided with Century Programmer™ are read-only files, so you will have to save any existing file that you modify or name under a different filename.

**Buffer Settings**

The second area of the work screen is the Buffer Settings and Oil Settings section. The *Buffer Mode* determines whether the buffer runs when the machine is traveling in the forward direction, the reverse direction, both directions, or not at all (see below). A separate determination can be made for each of the two available passes.
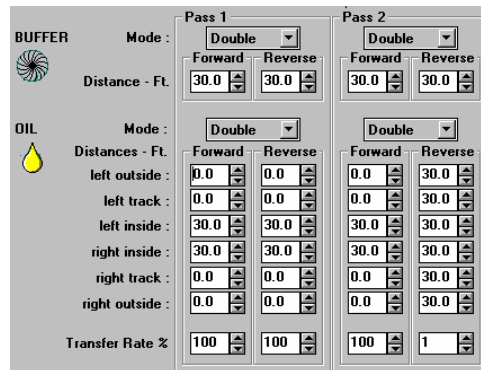


To adjust the Buffer Mode setting, click on the *Pass 1 Buffer Mode* <**Drop-down>** button.  Scroll through the list, and select the desired option (see below).  Do this for both passes.  These selections are independent of each other and may be different.
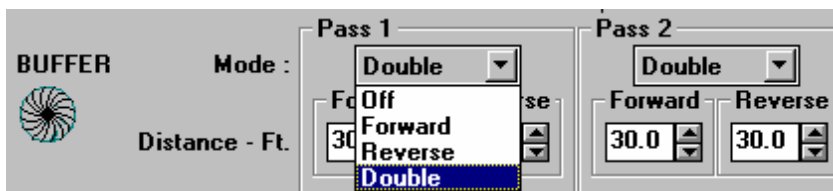


After setting the Buffer Mode, you must set the forward and reverse distances, as applicable, for each direction of each pass.  The forward distance is the distance the buffer will run while in contact with the lane surface when the machine travels in the forward direction.  The reverse distance is the distance from the foul line that the buffer will first contact the lane surface and begin to run when traveling in the reverse direction.  If a distance setting is not required by the selected Buffer Mode (e.g. the Buffer Mode is off), the number box for that pass will be dimmed indicating that it is not active and cannot be changed.  To set or change the buffer distance, tab to or click on the applicable distance box, and click on the <**Up>** or <**Down**> arrow button or enter the number from your computer's keyboard.

When the Buffer Mode is set for either the first or second pass, the Oil Mode also automatically changes to the same mode as the buffer. This occurs so that the Oil Mode is consistent with the Buffer Mode. You can, however, change the Oil Mode to a different setting if this is desired. Century Programmer™ will not allow you to make an incompatible selection.

**Oil Settings**

The *Oil Mode* determines whether the machine oils in the forward direction, reverse direction, both directions, or not at all. You set the Oil Mode and oil distances the same way you make the buffer settings.



For *HVO* Summit machines and Magnum machines equipped with version 8.0 or higher operating software, the six oil tanks can be operated independently of each other. Each tank is identified as either *left* or *right – inside*, *track*, or *outside*. Each setpoint is the distance from the foul line that the corresponding tank will disengage from the transfer roller stopping the transfer of oil to the transfer roller when traveling in the forward direction, or will engage the transfer roller starting the transfer of oil when traveling in the reverse direction. Each setting for each pass and direction can be different from the others. This opens a whole new vista for creating oil profiles.

For other machines, the six oil tanks are divided into three groups: Outer, Track, and Center. Each group consists of two tanks, one left and one right, that operate together. The outer distance is the distance from the foul line that the outer tanks will disengage from the transfer roller when traveling in the forward direction or will engage the transfer roller when traveling in the reverse direction. The track and center tanks function in the same manner as the outer tanks except that the distance setpoint for each group can be different.

The only restriction is that the oil distances cannot be set higher than the buffer distance, since the buffer must be operating to transfer oil to the lane surface. If you set the oil distance greater than the buffer distance, you will not be able to save the changes to the program, and you will receive a message that states that the buffer and oil settings are inconsistent when you attempt to save the program.

The *Transfer Rate %* setpoint determines the rate at which oil is transferred from the oil tank wicks to the buffer brush. The higher the setting, the higher the oil transfer rate. This is accomplished by operating the variable speed transfer roller motor between 1% and 100% of its maximum speed as determined by this setting. To adjust this setpoint, click on the <**Up>** or <**Down**> arrow to the right of the *Transfer Rate %* number box, or highlight the number and enter the new setpoint directly from you computer's keyboard. This setting can be different for the forward and reverse directions of each pass.

**Stripping and Vacuum Settings**

The *Stripping Mode* is selected by clicking on the drop-down button to the right of the stripping *Mode* setpoint box and selecting the desired mode. The choices are ***Off***, ***Full***, or ***Back***. Selecting ***Off*** turns off stripping and disables the vacuum, cleaner pad, and cleaner flow settings (cleaner flow is discussed later).



If ***Full*** is selected, the machine will strip the lane from the foul line to a point on the lane determined by the *Cleaner Pad Distance* setpoint. The maximum distance is 63 feet.

***Back*** means that only the back area of the lane will be stripped. Selecting the *Back* mode allows you to set the *Start* distance, which is the distance from the foul line to the point where stripping will begin. The *Start* distance is disabled in the other stripping modes.

To change the *Start* distance, first choose the <**BACK**> Mode and then click on the <**Up>** or <**Down**> arrow at the right of the *Start* box to enter the setpoint, or highlight the existing number in the *Start* box and enter the new setpoint directly from your computer's keyboard.

The *Cleaner Pad Distance* is the distance from the foul line to where the cleaner pad picks up off the lane surface during a stripping operation. Cleaner flow is turned off at this point, but the vacuum head remains in contact with the lane surface until the machine reaches the end of the lane.

There are two choices for the Vacuum Mode: *On Start* or *On Plug*. In the ***On Start*** mode, the vacuum motor starts when the machine's start button is pressed to begin a

lane conditioning program.  The vacuum motor remains on until the machine returns to the foul line at the conclusion of the first pass for that lane, at which time the vacuum motor stops.  In the **On Plug** mode the vacuum motor starts just as is does in the *On Start* mode, but remains on until power is removed from the machine.  To select the Vacuum Mode, click on the <**Drop-down>** button at the right side of the *Vacuum* mode setpoint box and select the desired mode.

## Cleaner Flow Settings

The *HVO* Summit is designed to allow the use of different cleaner flow rates for stripping the conditioned, or in-oil, area and for stripping the back lane area, and can apply these two different rates during the same pass.  Since the back area of the lane usually contains less oil than the oiled area, less cleaner is needed to strip this part of the lane.

To change these setpoints, click on the <**Up>** or **<Down>** arrow buttons at the right side of the *In oil* and *Back lane* setpoint boxes, or highlight the setpoint and enter the new setting directly from your computer's keyboard. The setpoint is adjustable from 1% to 100% of the maximum cleaner flow rate.

When the machine is set to strip-only, the **Back Lane** flow rate is used to strip the entire lane surface from the foul line to the *Cleaner Pad Distance* setting.

## Short Run

With *Short Run* turned off, the machine will travel the full length of the lane when running a lane conditioning program before returning to the foul line.  When turned on, *Short Run* overrides the lane conditioning program's distance settings and directs the machine to stop and begin the reverse pass (or return to the foul line if there is no reverse pass run in the program) when the machine reaches the Short Run *Turn-around Distance*.

To turn *Short Run* on or off, click on the *Short Run Mode* <**Drop-down**> button and select the desired mode.  To set the *Turn-around Distance*, first turn *Short Run* ON. Next, click on the *Turn-around Distance* <**Up>** or **<Down>** arrow button, or highlight the current setpoint and enter the new number directly from your computer's keyboard.  The *Short Run* Mode must be *ON* in order to make this setpoint change.

## Speed Settings

There are nine speed settings associated with the operation of the *HVO* Summit. Each of the machine functions of stripping, conditioning, and traveling (which is machine movement while neither stripping nor conditioning) can be set to one of three speeds (low, medium, or high), and each of these speeds is different depending on the function (see the Speeds Table below).

| Machine | Stripping | Conditioning | Traveling |
|---------|-----------|--------------|-----------|
| *HVO* Summit | H - 4.8 fps<br>M - 3.7 fps<br>L - 2.1 fps | H - 3.7 fps<br>M - 2.1 fps<br>L - 0.7 fps | H - 6.2 fps<br>M - 5.6 fps<br>L - 4.8 fps |

**Table 1,** Machine Speeds

The speed associated with a particular function can be different for each direction of each pass of a lane conditioning program. For example, you may choose to condition on pass 1 forward (P1F) at the slowest speed (L), and then for pass 1 reverse change the conditioning speed to medium (M). If there is a second pass in the lane conditioning program, the speeds for that pass can also be different. Silver Bullet® Magnum speeds are somewhat different from those listed here.

To assign a speed setting to a function, click anywhere on the <**Speed Settings>** button shown below.



The following screen will appear:
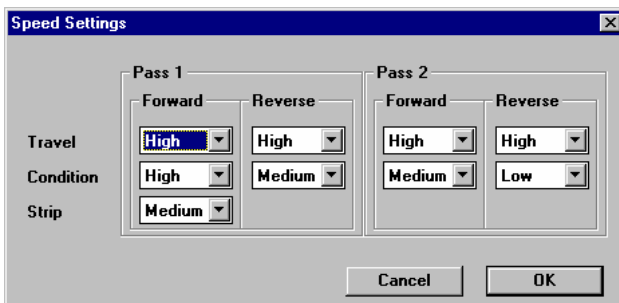


To set the speed of a machine function, click on a **<Drop-down>** button and choose High, Medium, or Low from the menu. Repeat as necessary for the remaining functions and passes. When finished, click **<OK>** or press **<ENTER>**. To exit

without making any speed changes, click **<Cancel>**.  As with all of the program parameters described in this chapter, the speed selections can be different for each lane conditioning program.

## Saving a New or Modified Data File

Because *FACTORY.HVO* (as well as the other factory-supplied Programmer files) is a read-only file, you will not be able to save any changes you have made to it under the existing filename.  In order to save your new worksheet, you must save it using a different filename. **Note:** when naming a file, you may not use more than eight (8) characters for the filename. Try the following example.

Click on the <**SAVE**> button or select <**SAVE AS**> from the command line's *File* drop-down menu. Do NOT use the *SAVE AS NEW* button.  The *File Save As* dialog box appears.
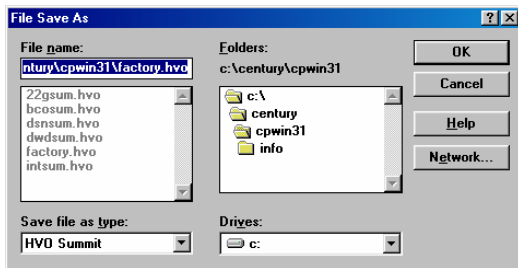


Press <**BACKSPACE>** to clear the current filename, and then type "tutorial.hvo". Click <**OK**> or press <**ENTER**>.  This will save all 20 *factory.hvo* program data worksheets (lane conditioning programs) under the filename *tutorial.hvo*.  You should do this and use the newly created file to try out the features of Century Programmer™.  Before editing a lane conditioning program (worksheet), you can name it and save it under its current program number or you can assign it any other program number from 1 to 20. To save a copy of a program within an existing work file, click on the <**Save As New**> button.  The *Save As New Program Number* dialog box appears.
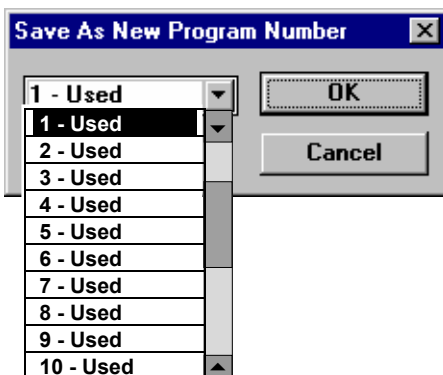
Click on the <**Drop-down**> arrow button and select the desired program number destination. Choosing a number that is different from the current program number will result in the chosen program being overwritten by the current program. <u>If changes to a program are made before clicking on the <**Save As New**> button, then the original program and the destination program will <u>both</u> have the changes that were made.</u>

Save As

1  2* 3  4  5  6  7  8  9  10  11  12  13  14  15  16  17  18  19  20
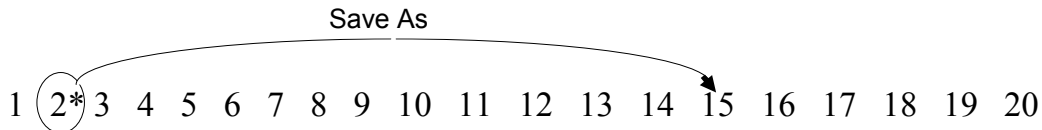
For example, the number lines above and below illustrate the *Save As New* function. Program 2 has been edited (but not saved) and becomes Program 2*. The asterisk [*] is shown here to indicate that a program has been changed (this is not shown on your computer screen when you edit a program). This program is then saved as Program 15. The final result, as shown below, is that Program 15 has been overwritten by Program 2* and becomes new Program 15*. The original Programs 2 and 15 no longer exist. The file will need to be saved and at that point the changes are finalized.

1  2*  3  4  5  6  7  8  9  10  11  12  13  14  15* 16  17  18  19  20

If you want to keep the original program unchanged (program 2 in this example) use the *Save As New* function first to select a destination program number and then make changes.

You can make a duplicate of a program simply by making it the current program and then saving it as another program number without making any changes to it. Just be sure that you do not overwrite a program that you want to keep.

## Downloading a Program's Data

### Configuring Communications

Before you can download the current program, all programs, or a range of programs, you must connect your PC to your QubicaAMF lane machine with the supplied interface cable and then select the computer's communications port that will be used to communicate with your lane machine. This is done by selecting <**Communications**> from the <**Configure**> pop-up menu. When you do this, the *Set Communications Port* dialog box appears.
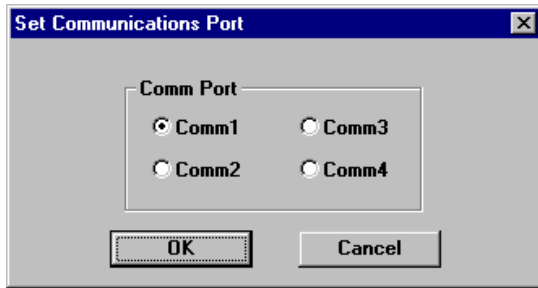
To set or change the port used to connect to your lane machine, click on the appropriate Comm Port radio button. Note that Comm 1 is selected in the previous configuration. Your computer may not have all of these ports available, but the chosen port must match the one to which the interface cable is attached. Refer to your computer's documentation regarding the designation of the computer's ports.

**Downloading Data**

In order to download programs, you must click on the <**Download**> button on the open worksheet.



The *Download Program(s)* dialog box is displayed.
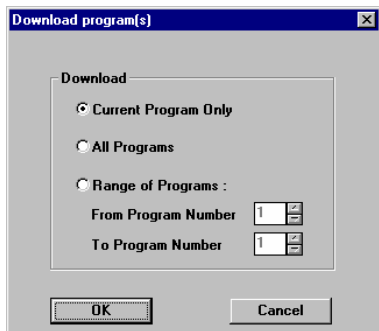


To download the current program on the worksheet, click on the <**Current Program Only**> radio button, then click on the <**OK**> button or press <**ENTER**>.

To download all programs in the current work file, click on the <**All Programs**> radio button, then click on the <**OK**> button or press <**ENTER**>.

To download a continuous range of programs, click on the <**Range of Programs:**> radio button. Enter the number of the first program in the range to be downloaded in the *From Program Number* box and the number of the last program in the range to be downloaded in the *To Program Number* box. You can either use your mouse to enter the numbers and move between boxes, or you can tab between boxes and enter the numbers directly from your keyboard.

When you have completed making your selection, click on the <**OK**> button or press <**ENTER**>. The programs that you have selected will be downloaded to your lane machine. If you are not connected to your lane machine or if the connection is bad or incorrect you will receive the following message.



Correct the problem and repeat the downloading procedure. In order to use the new program data after completing the download, you must first retrieve the desired program using menu function 01 even if the desired program number is the same as the lane machine's current program number.

## Viewing and Printing Graphs

Century Programmer™ allows the user to view and print graphical representations of the conditioner profiles and patterns for each of the lane conditioning programs. To view a program's graph, select the desired program as the current worksheet. Next, click on <**View**>, <**Preview**>. The following window will be displayed.
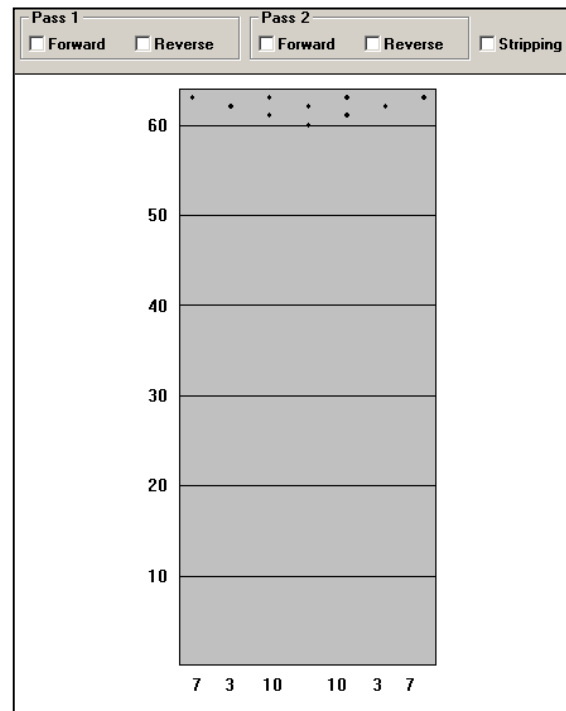


The graph represents the lane surface from the foul line to the tail plank as viewed from above. Initially the graph is blank. By clicking on the <**Pass 1**> and <**Pass 2**> <**Forward**>, <**Reverse**>, and <**Stripping**> check boxes, you can view a representation of the conditioner pattern in layers as they will be deposited on the lane surface by the selected program.

Each layer is presented in a different color or shade. As you superimpose one layer over another, the colors darken to show where the patterns of oil deposition overlap. The darker the color, the more conditioner deposited in that area.

To the left of the lane diagram is a distance scale, and below the foul line are numbers representing typical lane machine oil tank sizes. In this example the *outside* tanks are seven-inch tanks, the *track* tanks are three inches each, and the *inside* tanks are ten inches each (*outer, track,* and *center* tanks on other machines). These are the program default settings, but Century Programmer™ allows you to set the tank widths to match your machine's tank configuration. To change these settings, from the graph window click on <**Configure**>, <**Wick**>. The following dialog box is displayed.

**Configure Wicks**

Select width of each wick in boards:

| left outside : | 7 |
| left track : | 3 |
| left inside : | 10 |
| right inside : | 10 |
| right track : | 3 |
| right outside : | 7 |

OK

Set To Default

Cancel
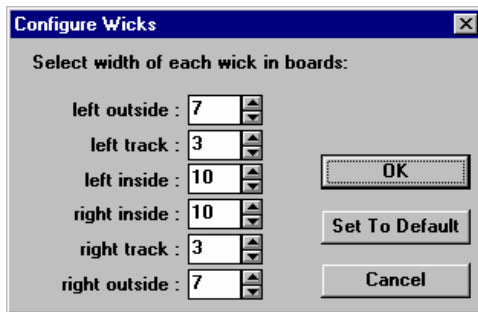
Click on the <**Up**> or <**Down**> arrows to the right of the tank section boxes to select the desired tank widths. When finished, click on <**OK**> or press <**ENTER**>. For the program to accept the changes, the combined width of all the wick sections must equal 40 inches.

To print a copy of the current graph, while in the graph window select <**File**>, <**Print**>. Century Programmer™ will ask you if you want to include program data on the printout. Selecting *YES* will result in both the *factory.hvo:1* (worksheet file) and *factory.hvo:2* (graph) screens being included on the printed page. If you choose this option, it is recommended that you first select the landscape mode in *Print Setup*. To return to the worksheet window from the graph window, click on <**View**>, <**Input Form**>.

## Other Features

### Security

Century Programmer™ allows you to set password protection for access. To add password protection to your programs click <**Configure**>, <**Security**>. The *Software Security* dialog box will appear.



Click on the <**Enable Software Password Security**> checkbox. Click <**OK**> or press <**ENTER**> to accept, or click <**Cancel**> to return to the previous window without enabling password protection. After clicking <**OK>**, the following dialog box is presented.
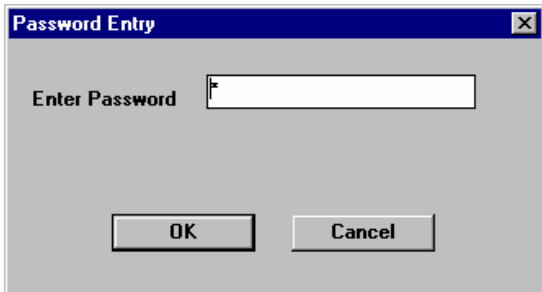


The prompt will be positioned at the beginning of the *Enter Password* box. Enter your chosen password and click <**OK**> or press <**ENTER**>. A *Confirm* dialog box will appear asking you to confirm your password selection. Re-enter your chosen password exactly as before and click on <**OK**> or press <**ENTER**>. Once the program has been closed, the Century Programmer™ will prompt you to enter your password before the program will begin again.

To disable password protection, click on <**Configure**>, <**Security**> and click on the <**Enable Software Password Security**> check box or in the Software Security box. This will remove the check mark. Click on <**OK**> or press <**ENTER**>.

### Downloading Messages

When you first energize your lane machine, a message scrolls across the control box's display window. *HVO SUMMIT* (for Summit machines) is the lane machine's default message. This is called the ***Custom Marquee Display***. This message is customizable

using Century Programmer™.  For Example, you might want to have the name of your bowling center proudly displayed whenever the lane machine is powered up.  To change this message, connect the interface cable between your lane machine and your computer and power up the lane machine.  Next, run Century Programmer™ and select <**Configure**>, <**Message Display**>.  The *Set Message Text* dialog box appears as shown below left.

Simply type in your message and click <**OK**> or press <**ENTER**>.  The message will download and begin scrolling across the lane machine's display screen.
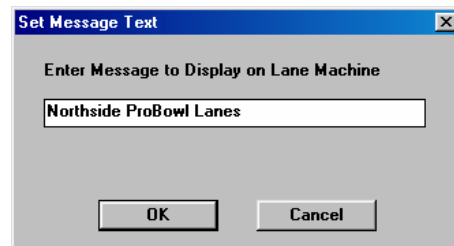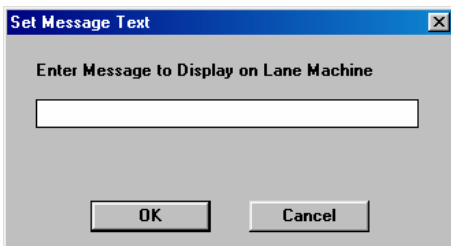
## Retrieving Programs and Schedules

If you have created or edited programs or schedules directly on your lane machine, you do not have to recreate them on your computer in order to make them available to Century Programmer™. You can retrieve them directly from your lane machine. To retrieve a program or programs, connect your computer to the lane machine with the interface cable and power up the lane machine. Next, start Century Programmer™, but close all worksheet windows, leaving Century Programmer™ running. The command line at the top of your screen will give you an option that was not available while working in a work sheet or graph screen. Click on <**Transfer**>, and a pop-up menu appears. From the list, click on <**Retrieve Programs**> and the *Select Machine Type* dialog box appears.
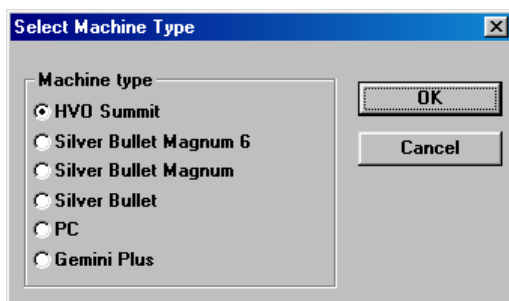
Select your machine type from the list by clicking on the applicable radio button, and then click <**OK**> or press <**ENTER**>. The *Retrieve program(s)* dialog box appears.
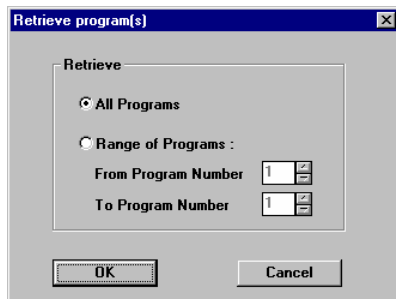
Click on either the <**All Programs**> or the <**Range of Programs**> radio button. Choosing *Range of Programs* activates the *From Program Number* and *To Program Number* boxes. Enter the beginning and ending program numbers to be retrieved by clicking on the <**Up**> or <**Down**> arrows or by entering the numbers directly from your computer's keyboard. When finished, click <**OK**> or press <**ENTER**>.

Century Programmer™ will retrieve the program(s) and display a worksheet on your screen. You should save this work file using the save command giving the file a name of your choice. You can now edit and download these programs as desired.

You can also retrieve, edit, and save schedules from your lane machine in the same manner.  Simply choose <**Transfer**>, <**Retrieve Schedule**>.  The machine's stored schedule will be loaded into Century Programmer™ and displayed on the computer's screen.  You should save this file under a name of your choice also, and then you can edit and download the schedule as desired.

Many of the other program features, such as setting up the communications port, enabling password security, and changing the lane machine's custom marquee display are available while working in the Scheduler screen.


## Scheduler

The *HVO Summit* has the capability of scheduling and running specific lane conditioning programs on selected lanes during specific times of the day.  The lane conditioning program can be different from lane to lane and from day to day.  It's all very easy with the Scheduler function.  Century Programmer™ comes with a Scheduler file installed.  This file can be edited and expanded to accommodate any size bowling center.  To access this function choose <**File**>, <**Open**> from the initial Century Programmer™ screen.  The *File Open* dialog box will appear.
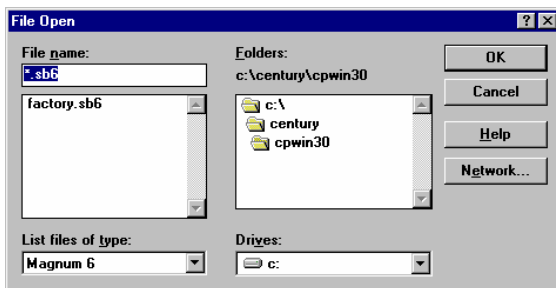


Click on the <**Drop-down**> arrow to the right of the *List files of type:* box and select <**Scheduler**> from the pop-up menu.  All of the stored Scheduler files will now be listed in the large box above the *List files of type:* box.  Initially the only file that will be listed is *factory.sch*.  Others are added as you either create or retrieve and save them.  Click on <**factory.sch**> to select it.  This file will now be listed in the large box and in the smaller *File name* box above it.  Click on <**OK**> or press <**ENTER**> to open this file.

There are two Scheduler screens (see below). The *FACTORY.SCH:1*, is the default Scheduler screen, and *FACTORY.SCH:2*, is the Time Zones screen.

**Factory.sch:1**

| | Mon | Mon | Mon | Tue | Tue | Tue | Wed | Wed | Wed | Thu | Thu | Thu | Fri | Fri | Fri | Sat | Sat | Sat | Sun | Sun | Sun |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | A | B | C | A | B | C | A | B | C | A | B | C | A | B | C | A | B | C | A | B | C |
| Lane 1 | 6 | | | 6 | | | 6 | | | 6 | | | 6 | | | 10 | | | 10 | | |
| Lane 2 | 6 | | | 6 | | | 6 | | | 6 | | | 6 | | | 10 | | | 10 | | |
| Lane 3 | 6 | | | 6 | | | 6 | | | 6 | | | 6 | | | 10 | | | 10 | | |
| Lane 4 | 6 | | | 6 | | | 6 | | | 6 | | | 6 | | | 10 | | | 10 | | |
| Lane 5 | 6 | | | 6 | | | 6 | | | 6 | | | 6 | | | 10 | | | 10 | | |
| Lane 6 | 6 | | | 6 | | | 6 | | | 6 | | | 6 | | | 10 | | | 10 | | |
| Lane 7 | 6 | | | 6 | | | 6 | | | 6 | | | 6 | | | 10 | | | 10 | | |

**Factory.sch:2**

| | Mon | Tue | Wed | Thu | Fri | Sat | Sun | |
|---|---|---|---|---|---|---|---|---|
| Start Timezone A | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 | |
| Start Timezone B | 11:00 | 8:00 | 8:00 | 8:00 | 8:00 | 8:00 | 8:00 | |
| Start Timezone C | 16:00 | 16:00 | 16:00 | 16:00 | 16:00 | 16:00 | 16:00 | |

The *Factory.sch:1* screen shows the Scheduler grid with the days of the week and the time zones across the top, and the lanes in numerical order down the left side. Scheduler allows you to assign any of the 20 lane conditioning programs to any lane, during any of three separate, daily time zones for any day of the week. This example shows that for this hypothetical seven lane bowling center, lane conditioning program number 6 is scheduled to be run during the first time zone on Monday through Friday, and that program number 10 will be run during the same time zone on weekends.

To change these settings, first save this file under a different filename. This is the factory default read-only file, and Century Programmer™ will not allow you to save changes to this file. To save this file under a different filename, click <**File**>, <**Save As**> from the *command* line, and enter a new filename in place of *factory.sch*.

The factory-supplied schedule is for seven lanes. Your bowling center is likely to have a different number of lanes. Century Programmer™ easily accommodates up to a maximum of 255 lanes. To change the number of lanes to match your bowling center, click <**Edit**>, <**Number of lanes**>. The *Edit Number of Lanes* dialog box will appear.

**Edit Number of Lanes**    [X]

**Number of Lanes**    7

    OK        Cancel
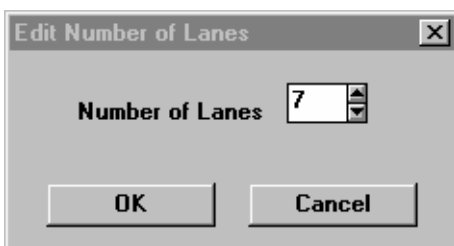
Enter the number of lanes by using the up or down arrow buttons or highlight the box and enter the number directly from your keyboard. If you build a grid with more lanes than can fit on your computer's screen, a scroll bar will appear on the right side of your screen, and you can use this to view any portion of your schedule. Once you have set up the Scheduler to match the number of lanes in your bowling center, simply use the *Edit* pop-up menu as discussed below to complete your schedule.

To modify the schedule, you do not enter data directly in the Scheduler grid. To edit a single lane and time zone, click on <**Edit**>, <**Single**> and the *Edit Single Schedule* dialog box appears.

Click on the <**Drop-down**> arrows to the right of the various boxes and make your selections. It is necessary to click directly on the <**Day**> and <**Time Zone**> pop-up selections in order to capture them. To delete a program from a time zone slot without replacing it with another program, select the applicable <**Day**>, <**Time Zone**>, and <**Lane**> in the *Edit Single Schedule* dialog box, highlight the *Program* box, and type in a "0" (zero). When finished editing, click <**Update Schedule**>. The new schedule will appear in the edited slot on the Schedule screen (grid).

To edit a continuous range of lanes or time zones, click on <**Edit**>, <**Range**>. The *Edit Range Schedule* dialog box will appear.

This dialog box works similarly to the *Edit Single Schedule* dialog box. This box has *From* and *To* sections allowing an entire continuous range of lanes to be scheduled at one time. When editing has been completed, click <**Update Schedule**> to update the Scheduler grid.

While the *Edit Range Schedule* dialog box will overwrite an existing schedule, you may want to clear a section of an existing schedule. For example, when you are changing the time zone in which lane maintenance is to be performed, you will need to clear the previously scheduled time zone or the machine will be scheduled to perform lane maintenance twice per day. Clearing a range is easy. Simply select <**Edit**>, <**Clear Range**> and enter the applicable data in the *Clear Schedule Range* dialog box. This box is identical to the *Edit Schedule Range* dialog box except that you do not enter a program number.
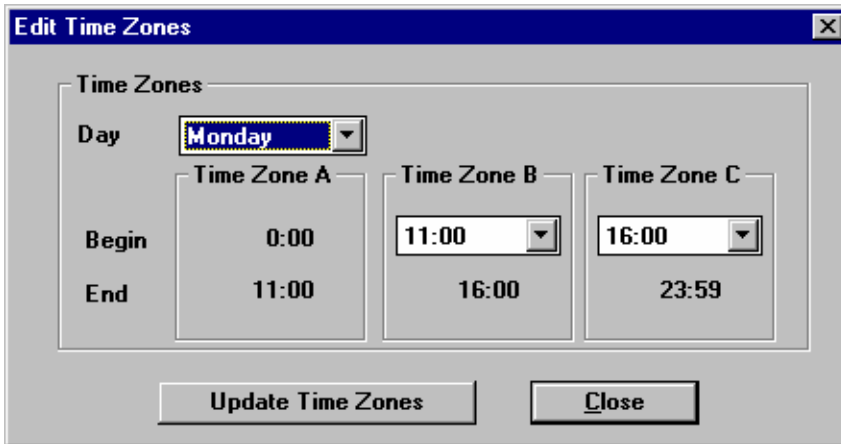
**Time Zones**

Century Programmer™ provides you with the ability to schedule lane maintenance during three different daily time periods called *Timezones*. They are *Timezone A, Timezone B,* and *Timezone C*. Century Programmer™ gives you the ability to set the start and end times of these time zones to suit your needs. To set the time zones, click <**View**>, <**Time Zones**> from the Scheduler *FACTORY.SCH:1* screen. The program switches to the Scheduler *FACTORY.SCH:2* screen as shown below.

| | Mon | Tue | Wed | Thu | Fri | Sat | Sun |
|---|---|---|---|---|---|---|---|
| Start Timezone A | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 | 0:00 |
| Start Timezone B | 11:00 | 8:00 | 8:00 | 8:00 | 8:00 | 8:00 | 8:00 |
| Start Timezone C | 16:00 | 16:00 | 16:00 | 16:00 | 16:00 | 16:00 | 16:00 |

The screen shows a grid with the days of the week running across the top and Timezones A, B, and C along the left side. Note that the times shown are the <u>starting</u> times of the time zones. The starting time of Timezone A is 0:00, or midnight, the beginning of the day. This starting time is fixed and cannot be changed. The starting times of Timezones B and C can be set to any time subject to the stipulations contained below.

The starting time of one time zone is the ending time of the previous time zone. There are no gaps between time zones. To change the start times of the time zones, click <**Edit**>, <**Time Zones**>. The *Edit Time Zones* dialog box will appear.

**Edit Time Zones**

Time Zones
Day: Monday

| | Time Zone A | Time Zone B | Time Zone C |
|---|---|---|---|
| Begin | 0:00 | 11:00 | 16:00 |
| End | 11:00 | 16:00 | 23:59 |

Update Time Zones | Close

Choose the day of the week in the *Day* box, and then set the start times for Timezones B and C. As you select a start time using the <**Drop-down**> buttons, the end time of the previous time zone will change to equal the start time just selected. When you have finished editing that day's time zones, click on <**Update Time Zones**> to apply the changes to the time zone grid. The latest start time on the drop-down list is 23:59,

which will show up as 24:00 in the time zone grid. This is the same as 0:00, or midnight. Repeat this process for the remaining days of the week.

If you attempt to set the start time of Timezone B later than the start time of Timezone C, the start time of Timezone C will change to equal the start time of Timezone B. Conversely, if you attempt to set the start time of Timezone C earlier than the start time of Timezone B, the start time of Timezone B will change to equal that of Timezone C. Since the start times of Timezones B and C would now be the same, the duration of Timezone B would be zero and Timezone B would be skipped (along with its associated schedule). For this reason, it is recommended that you allocate sufficient time for each time zone in order to accommodate your bowling center's lane maintenance schedule.

To return to the Schedule screen, click <**View**>, <**Schedule**>.

When you have completed creating or editing the schedule, save this file using a filename other than *factory.sch*.

The file can be downloaded to your lane machine using the download feature from within Scheduler. To do this, establish a connection between your computer and the lane machine; start Century Programmer™; and open your Scheduler file. Finally, select <**Download**>, <**Schedule**> from either of the two main Scheduler screens.


## Using Help

Help can be used to find out more information about a given topic, window, lane program parameter, or CPWIN function. There are several methods for obtaining help from within Century Programmer ™. These methods are:

a) Help Index

b) Help Search

c) Help Hypertext Links

d) Context Sensitive Help

To access *Help*, click on <**HELP**> in the main menu. The *Help* drop-down menu appears showing the three available selections. The bottom selection, *About CPWIN...* is simply a statement that shows the version of CPWIN software you are using as well as the toll free Customer Service telephone number.

If *Using Help* is selected, three tabs appear: ***Contents, Index,*** and ***Find*** or ***Search*** depending on the version of Windows® you are using. Each tab functions as a different method of navigating through *Help*. Accessing the ***Contents*** tab presents you with a number of Windows® help functions. These items contain all the

information necessary to fully understand, utilize, and customize *Help*. Reading the information contained there is one way of becoming familiar with *Help*.

## *Help's* Help Index

The next tab is the *Index* tab. Using this feature you can find information on how to use *Help* simply by typing in the name or title of the help topic. As you type, *Help* moves the cursor to the topic that it determines most closely matches what you have typed. Often *Help* will have selected the desired subject before you have finished typing in its name. Of course, you can also scroll to the desired topic. Once the desired topic has been found, click **<Display>** to access a dialog box that explains the selected help topic.

## Help Search

The third tab is the *Find* (or *Search*) tab. Use this tab to find help information when you don't know the exact terminology of the help function you are trying to locate. When you type in a keyword or words, a list of subjects is provided to help narrow the search. This list changes depending on what you have typed, if anything, in the keyword field. The nice thing about this feature is that it attempts to match related words with a help topic. This means that you can locate the topic by selecting a word to pinpoint the topic even though the word itself is not in the name or title of the topic.

There are also a number of options for you to choose from in setting up the parameters of the search. By clicking on the *Options* button you can choose how *Help* looks at what you type in the keyword field. Help can look for words that begin with, contain, end with, or match the words or letters you type in the first field. It can search for a group of words in any order or it can look for any word within a group of words. It's a very powerful tool.

The first time you use the *Find* Help function, you will be prompted to create a data base. You will be presented with several choices. Simply select the one you want, and in a few seconds you're in business. You can rebuild the data base by clicking on the *Rebuild* button from the opening *Find* screen.

## Help Hypertext Links

You may notice that when you use the index or search functions to select a topic, an information dialog box appears with information about the subject. Some of the words may be a different color than the rest of the text. They are also underlined for identification when using a monochrome monitor. When you place the cursor over one of these words, the cursor changes to a hand. This indicates that this is a hypertext link. Clicking on the word takes you directly to more information about

that particular word or phrase. These links help you to better understand the various functions available without having to stop what you are doing to look it up. Clicking *Back* takes you back to the point you were at before clicking on the word. Clicking on *Help Topics* returns you to the opening *Help* dialog box.

## Context Sensitive Help

If you have chosen to view the *Status Bar* from the *View* drop-down menu, you will notice a message at the bottom of the screen. It states: *For Help, press F1*. Pressing F1 brings up the context sensitive help screens. These screens help you to understand the functions of the various CPWIN buttons, menus, and dialog boxes to help you use the various CPWIN program features.

You can also access the context sensitive help screens by clicking on the pop-up *Help* button on the Tool Bar. The button looks like a question mark with an arrow next to it. When you click on this button, a large question mark appears next to the cursor. Move this cursor to the box or button that you want help information on, and click. The context sensitive dialog box will appear.

## CPWIN Help

The last *Help* area to discuss is the first item on the *Help* drop-down menu. It is simply called *Index*. This index differs from the help index discussed earlier in that the listed items are specific to learning to use CPWIN, whereas the first help index described earlier lists items specific to learning to use *Help* itself. This index consists of a list of general topics from which you make the desired choice. All the items in the list are hypertext items, and selecting one takes you to a more specific list. Clicking on one of the more specific items takes you to the information screen for that item. Often there are additional hypertext items to help you understand the topic better. To return to the previous level, click on the <**Back**> button. To return to the initial list from any level, click on the <**Contents**> button.

As discussed earlier in ***Help's* Help Index** and **Help Search**, there is also a help search feature that utilizes a CPWIN *Search* index and a CPWIN *Find* data base. The first time you attempt to use the data base, *Help* will have to create it. From then on, it's readily available, or it can be rebuilt to new specifications.

To become more familiar with *Help's* features, you should try using *Help*. *Help* is designed to be its own teaching tool, and there is no substitute for just browsing and exploring.

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## References

This chapter presents a detailed reference of important aspects of Century Programmer™ software.

### <u>O</u>pen command (<u>F</u>ile menu)

Use this command to open an existing file of programs in a new window. You can open multiple files of programs at once. Use the <u>W</u>indow menu to switch from one open program file to another.
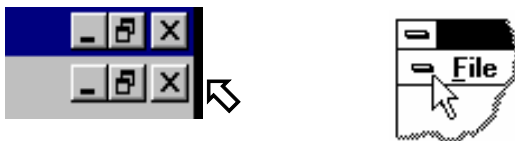
**Shortcuts**

Toolbar: 

Keys: CTRL+O

### <u>C</u>lose command (<u>F</u>ile menu)

Use this command to close all windows containing the active file of programs. Century Programmer™ suggests that you save changes to your program file before you close it. If you close a file of programs without saving, you lose all changes made since the last time it was saved.

You can also close a program file by using the *Close* icon on the document's window, as shown below:

Mouse: Click on the program file's Control Menu button.



Keys: CTRL+F4

### <u>S</u>ave command (<u>F</u>ile menu)

Use this command to save the active program file to its current name and directory. If you want to change the name and directory of an existing program file before you save it, choose the *Save <u>as</u>* command

**Shortcuts**

Toolbar: 

Keys: CTRL+S

**Save <u>A</u>s command (<u>F</u>ile menu)**

Use this command to save and name the active program file. Century Programmer™ displays the *Save as* dialog box so you can name your program file.

To save a program file with its existing name and directory, use the *Save* command.

**1, 2, 3, 4 command (<u>F</u>ile menu)**

Use the numbers and filenames listed at the bottom of the *File* menu to open the last four program files you closed. Choose the number that corresponds to the program file you want to open.

**E<u>x</u>it command (<u>F</u>ile menu)**

Use this command to end your Century Programmer™ session. You can also use the Close command on the application Control menu. Century Programmer™ prompts you to save documents that have unsaved changes.
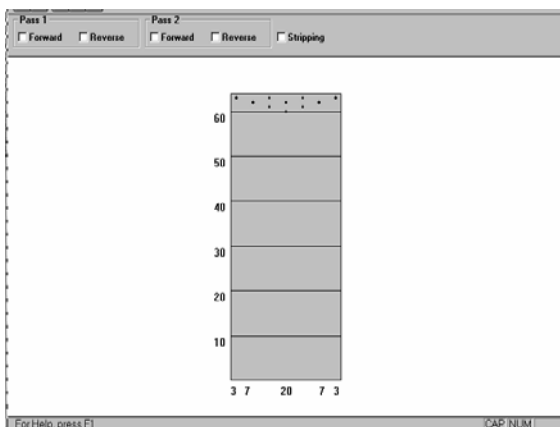
**Shortcuts**
    Mouse:    Click the application's Control Menu button.



    Keys:    ALT+F4

**<u>P</u>review command (<u>V</u>iew menu)**

Use this command to display a graphic view of a lane conditioning program's oil deposition pattern.

| Click | To |
|---|---|
| ☐ Pass 1 - Forward | To display current pattern for pass 1 forward run. |
| ☐ Pass 1 - Reverse | To display current pattern for pass 1 reverse run. |
| ☐ Pass 2 - Forward | To display current pattern for pass 2 forward run. |
| ☐ Pass 2 - Reverse | To display current pattern for pass 2 reverse run. |
| ☐ Stripping | To add stripping to the current pattern. |

To return to the Work Screen, select <**View**>, <**Input Form>**.  This closes the Graph File screen and returns you to the Work Screen.

**Shortcuts**

Mouse:   Click on the graphic page's file's close icon.
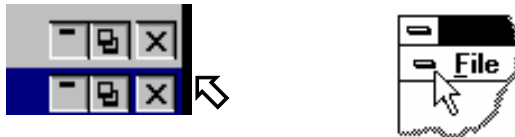
Keys:     CTRL+F4

**Toolbar command (View menu)**

Use this command to display or hide the Toolbar, which includes buttons for some of the most common commands in Century Programmer™, such as *File Open*.  A check mark appears next to the menu item when the Toolbar is displayed.

The toolbar is displayed across the top left area of the application window, below the command line or menu bar.  The toolbar provides quick mouse access to many tools used in Century Programmer™.

To hide or display the Toolbar, choose < **View**>, <**Toolbar**>.

| Click | To |
|---|---|
| | Open an existing document.  Century Programmer™ displays the *Open* dialog box, in which you can locate and open the desired file. |
| | Save the active document or template with its current name.  If you have not named the document, Century Programmer™ displays the *Save As* dialog box. |
| | Print the active file. |
| | Display copyright notice and version number of Century Programmer™. |
| | Context sensitive help command to obtain help on some portion of Century Programmer™. |

### Status Bar command (View menu)

Use this command to display or hide the Status Bar, which describes the action to be executed by the selected menu item or toolbar button, as well as the keyboard latch state. The Status Bar appears at the bottom of the program screen.  A check mark appears next to the menu item when the Status Bar is displayed.

CAP

To display or hide the status bar, choose <**View**>, <**Status Bar**>.

The left area of the status bar describes actions of menu items as you use the arrow keys to navigate through menus.  This area similarly shows messages that describe the actions of toolbar buttons as you depress them, before releasing them.  If, after viewing the description of the toolbar button command, you wish not to execute the command, then move the pointer off the toolbar before releasing the mouse button.

The right area of the status bar shows which of the following keyboard keys are latched down:

| Indicator | Description |
|---|---|
| CAP | The Caps Lock key is latched down. |
| NUM | The Num Lock key is latched down. |
| SCRL | The Scroll Lock key is latched down. |

## <u>C</u>ommunications command (<u>C</u>onfigure menu)

Use this command to select the communications (Comm) port on your computer that you will use to communicate with your lane machine.

## <u>C</u>ascade command (<u>W</u>indow menu)

Use this command to arrange multiple opened windows in an overlapped fashion.

## <u>T</u>ile command (<u>W</u>indow menu)

Use this command to arrange multiple opened windows in a non-overlapped fashion.

## <u>A</u>rrange Icons Command (<u>W</u>indow menu)

Use this command to arrange the icons for minimized windows at the bottom of the main window.  If there is an open document window at the bottom of the main window, then some or all of the icons may not be visible because they will be underneath this document window.

## 1, 2, ... command (<u>W</u>indow menu)

Century Programmer™ displays a list of currently open document windows at the bottom of the Window menu.  A check mark appears in front of the document name of the active window.  Choose a document from this list to make its window active.

## <u>I</u>ndex command (<u>H</u>elp menu)

Use this command to display the opening screen of *Help*.  From the opening screen, you can jump to step-by-step instructions for using Century Programmer™ (CPWin) and various types of reference information.

Once you open *Help*, you can click the *Contents* button whenever you want to return to the opening screen.

## Using the <u>H</u>elp command (<u>H</u>elp menu)

Use this command for instructions about using *Help*.

## <u>A</u>bout command (<u>H</u>elp menu)

Use this command to display the copyright notice and version number of Century Programmer™.

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