

ADJUSTABLE FREQUENCY DRIVES

SERIES 9000 AF DRIVES

SVLoad Tool

Loading System Software

- Instruction Sheet




Cutler-Hammer

EAT•N

Loading System Software

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	WARNING: <i>When installing new system software into an AF drive, ensure that the system software matches the drive's ratings exactly. Installing incorrect software will cause the some drive functions to operate incorrectly, and may cause serious damage to the drive and connected equipment.</i>
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Because of the variety of uses for this equipment and because of the differences between this solid-state equipment and electromechanical equipment, the user of and those responsible for applying this equipment must satisfy themselves as to the acceptability of each application and use of the equipment. In no event will EATON Cutler-Hammer be responsible or liable for indirect or consequential damages from the use or application of this equipment.

1. Introduction

This manual assumes that the SVLoad tool is installed on a computer that is communicating with an SV9000 drive. It covers instructions on how to communicate with the drive via the SVLoad application and how to use the SVLoad application to change or update the drive's system software.

2. Determining the SV9000 Drive Type

	<p>CAUTION: <i>It is critical to verify that the type code you choose in the SVLoad program matches the drive's catalog number exactly (see below). Choosing the incorrect type code may destroy the drive.</i></p>
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The SV9000 drive's catalog number can be determined by viewing the drive's nameplate, as found in the illustration below:

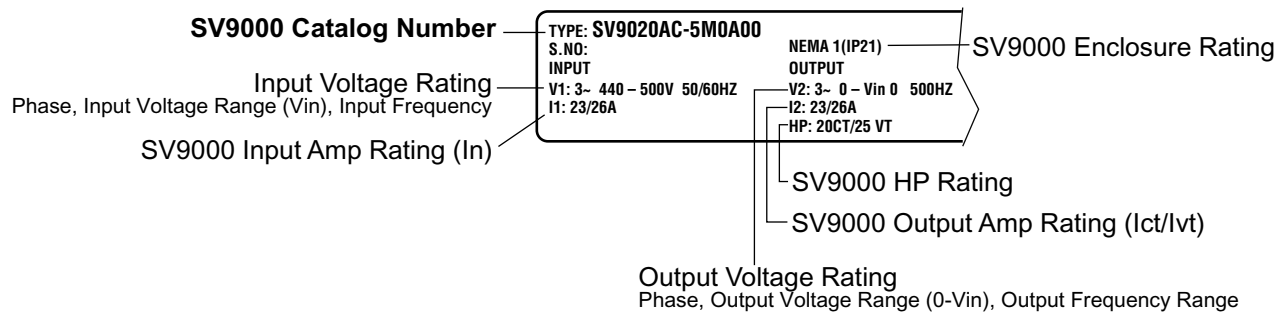


Figure 1: SV9000 Drive Nameplate

3. SVLoad Basics

- To run the SVLoad Application, double click on the SVLoad icon.



Figure 2: The SVLoad Program Icon

- For screen definitions, see Figures 3-5 below.

The system, option and application buttons are used to change to the system, option, and application screens.

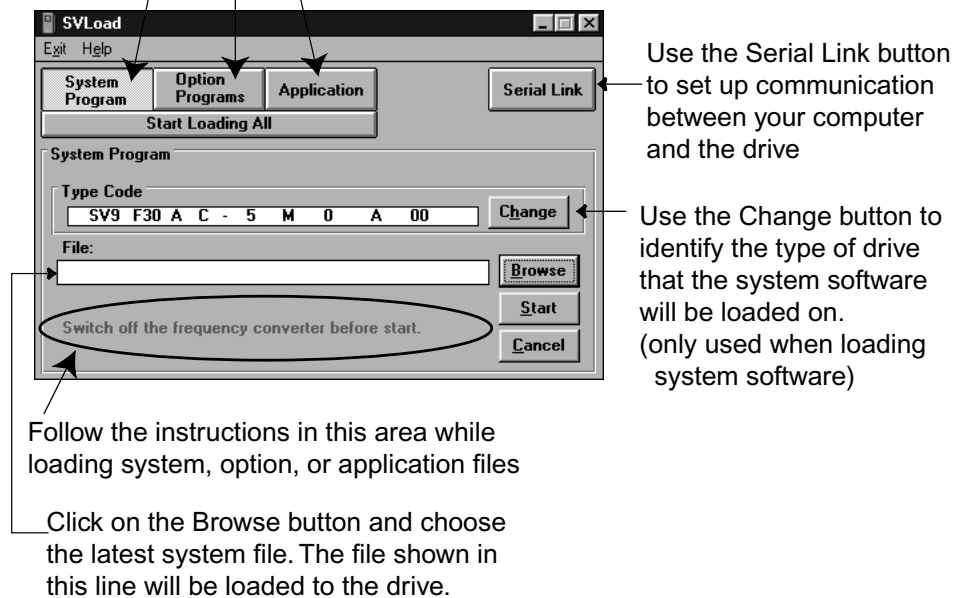
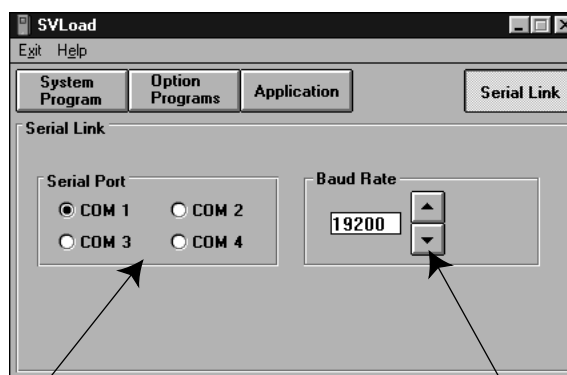


Figure 3: Start-up Screen



Choose the COM port that the SVDrive cable is plugged into.

Choose the baud rate for loading software. 19200 baud is the recommended baud rate. Choose lower baud rates in electrically noisy environments.

Figure 4: Serial Link Setup Screen

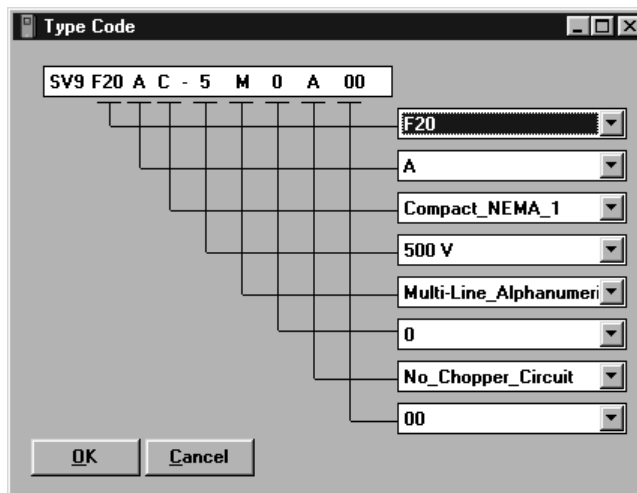


Figure 5: The Type Code Setup Screen

4. Establishing Communication

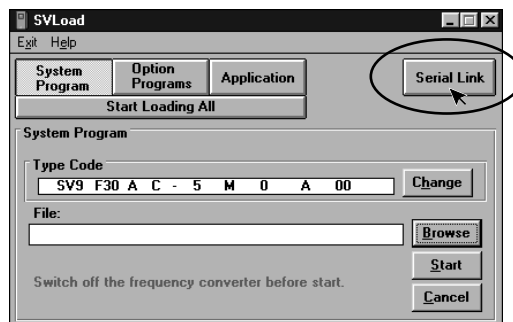
**CAUTION:**

Do not use any cable other than SVDrive cable. Using the incorrect type of communication cable may cause the computer or drive failure.

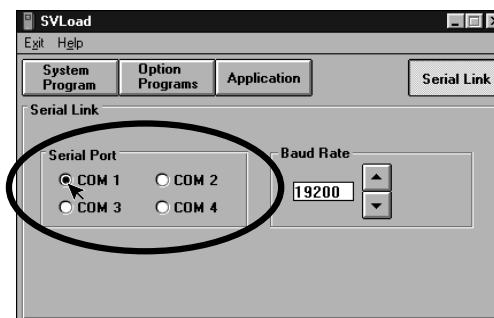
1. Plug the SVDrive cable into an unused serial communication port on the computer. Instructions for making an SVDrive cable are included in the "SVLoad Application Instruction Sheet."
2. Unplug the keypad or keypad cable from the Series 9000 drive.
3. Plug the SVDrive cable into the Series 9000 drive communication port that the keypad or keypad cable had been plugged into.
4. Run the SVLoad software by clicking on the SVLoad icon.



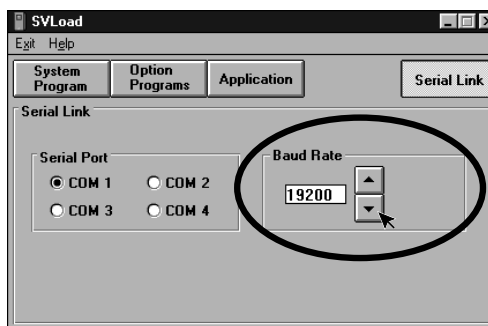
5. Click on the "Serial Link" button.



6. Select the COM port of the computer that the SVDrive cable is plugged into.



- Set the baud rate to match the computer and drive specifications.



Note: The baud rate is selectable between 1200 baud and 115200 baud. The recommended baud rate setting is 19200; however in magnetically clean environments, higher baud rates will be acceptable. If the "Too many retransmissions" error is generated, lower the baud rate.

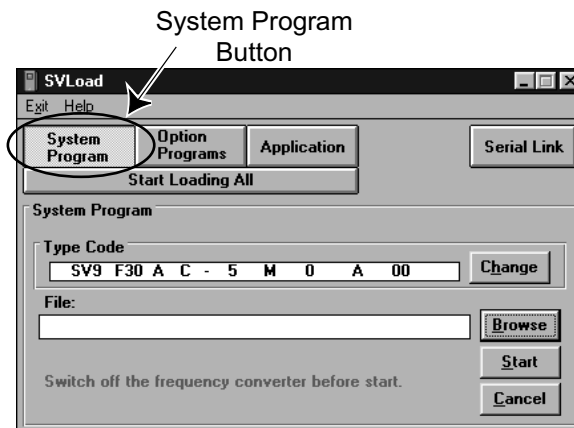
- Click on the System Program button. (see instructions below)

5. Loading System Software

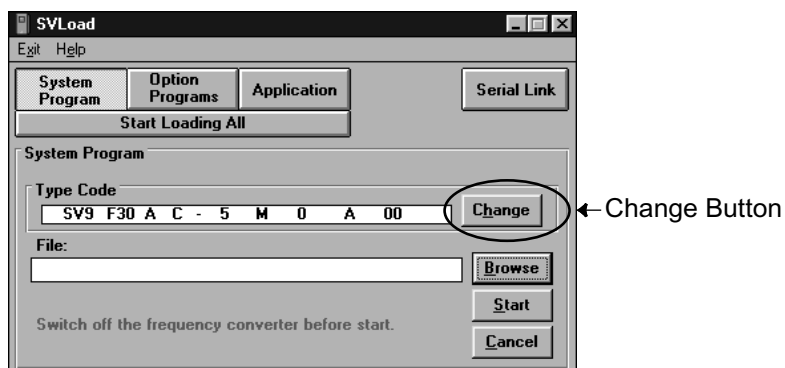
- Run the SVLoad software by clicking on the SVLoad icon.



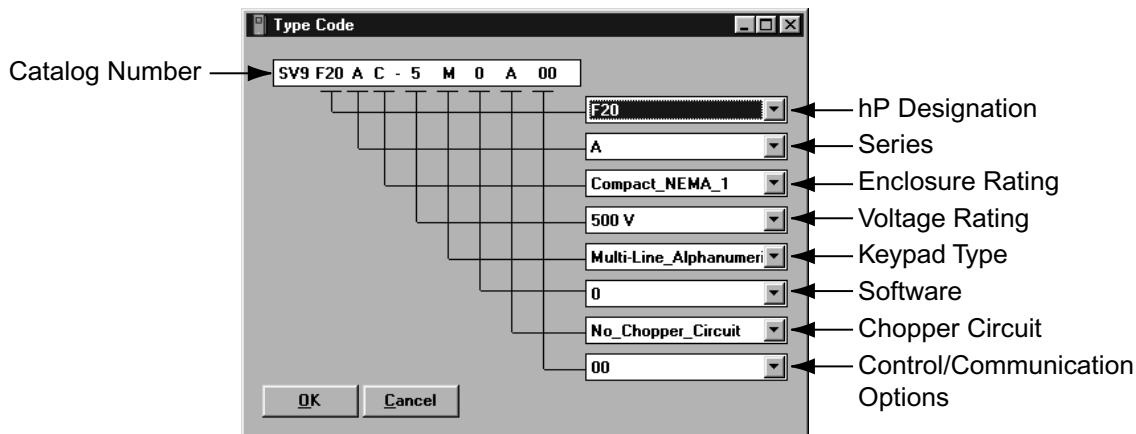
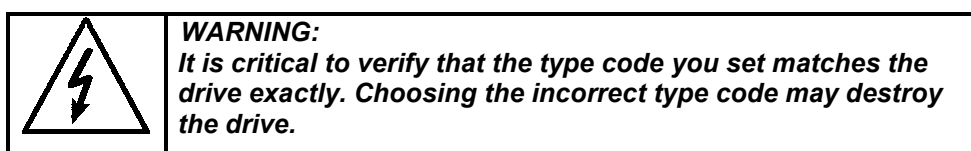
- Establish communication between your computer and the Series 9000 drive. For information on how to set up communications, see the section of this manual titled "Establishing Communication."
- Click on the "System Program" button if the system screen is not shown.



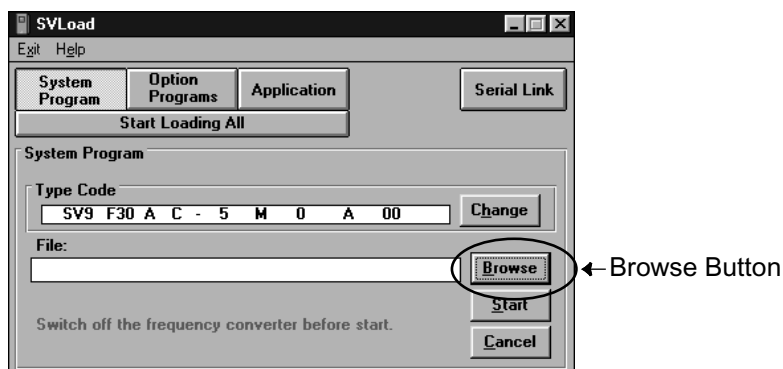
4. Click on the “Change” button in the type code box.



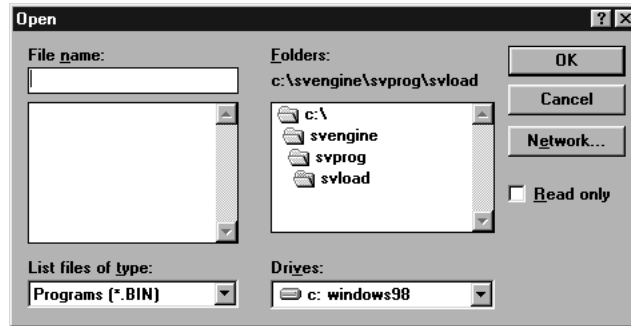
5. Choose the correct options to match the nameplate on the drive.



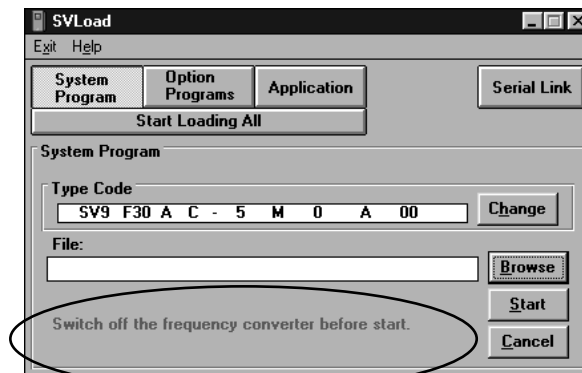
6. Click on the “OK” button to return to the System Program screen.
7. Click on the “Browse” button.



8. Find and choose the system software file (*.bin) you wish to install.

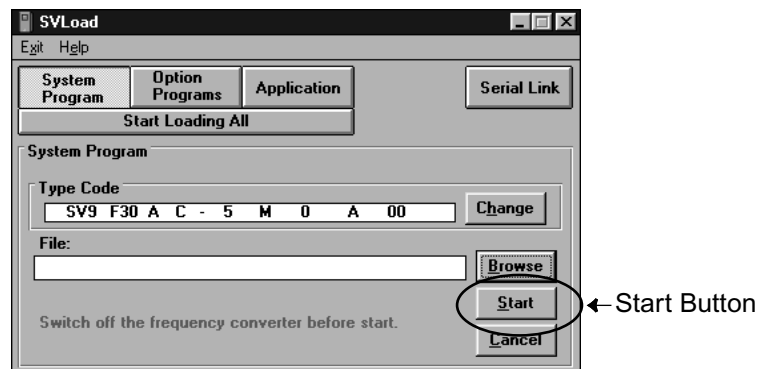


9. Click the “OK” button in the find dialog.
10. Check that the file name shown in the SVLoad application is the appropriate file.
11. Follow the instructions shown in the lower half of the Application window.

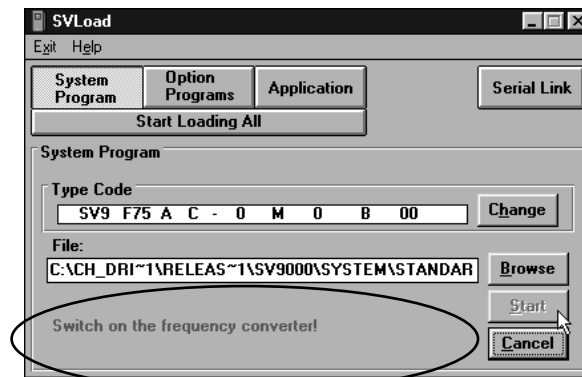


System Software load instructions

12. Click on the “Start” button.

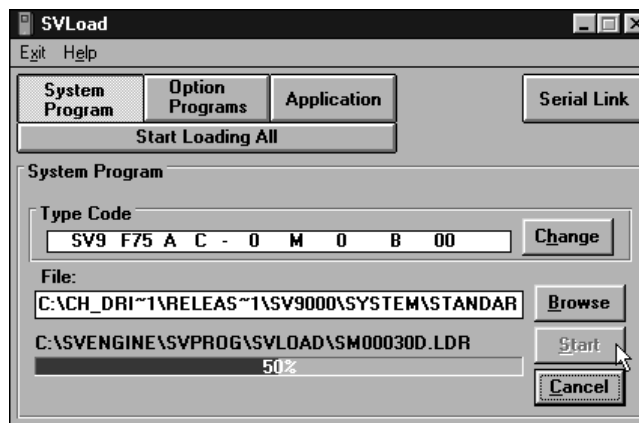


13. Follow additional instructions shown in the lower half of the Application window.

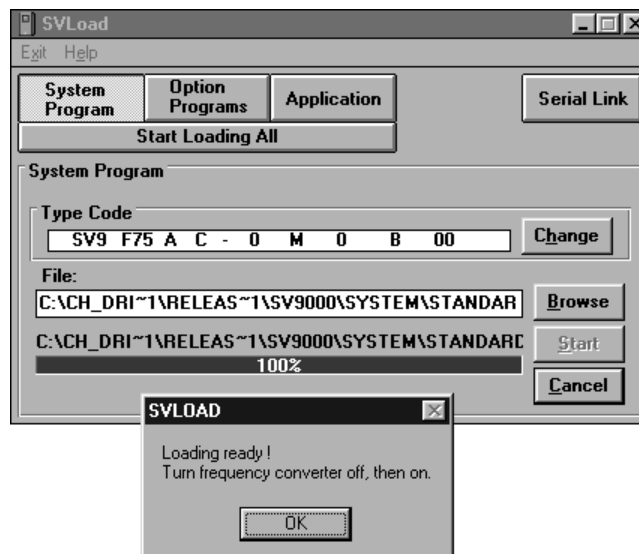


System Software load instructions

14. A status bar will be shown in the lower part of the screen, as below:



15. When loading is finished, a confirmation screen is displayed. Cycle power to the drive, then click the OK button to exit.



6. Troubleshooting

6.1 Communication Errors

Error Message	Cause/Solution
"Too many retransmissions"	<i>Cause:</i> Noise interference with communication; <i>Solution:</i> Set baud rate to a lower value <i>See "Establishing Communication" section.</i>

For technical support contact your Cutler-Hammer distributor or the
Cutler-Hammer AF Drives Product Integrity Center at 1-800-322-4986.