SYSTEMS

Engineering Associates, Inc.

SEA Program Upload / Retrieve
Quick Reference
Using SYSView

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This supplemental document is intended to provide a "Quick" instruction reference to uploading a SYSdev program, user data and timing channel setpoints from an SEA controller using the SYSView online utility software.

Note: Uploading (or retrieving) is defined as saving (reading) information "From" an SEA controller to a programming device such as a laptop computer.

In general, the following should be done to create a complete backup of an SEA PLC program, data memory and PLS timing channel setpoints:

1) "Upload" the SYSdev PLC program from the controller. This is the compiled machine (HEX) code read from the program memory space of the SEA controller.
2) "Upload" the "Target Board" or user data memory. This contains the setup parameters, production data, etc.
3) "Upload" timing channel setpoints (separate PLS file).

Note: An RS-232 cable must be connected from the programming device to the **PROG** port of the SEA processor. ALL "Upload" functions CAN be performed while the machine is in production.

To "Upload" a PLC program from an SEA processor, perform the following:

This function should only be performed if the source code files are NOT available or to make a backup of the current program running in the controller.

Note: This function will take some time to complete as it reads the entire program memory space of the controller. The uploaded program is only the machine (HEX) code that was previously downloaded to the controller and CAN NOT be edited.

1) From the Windows **Start** menu, select **Programs >> Systems (folder) >> SYSView**.
2) The SYSView splash screen will be displayed. **Click** on the screen with the mouse or press **Enter**.
3) From the **File** menu select "**Upload PLC/PLS Program**".

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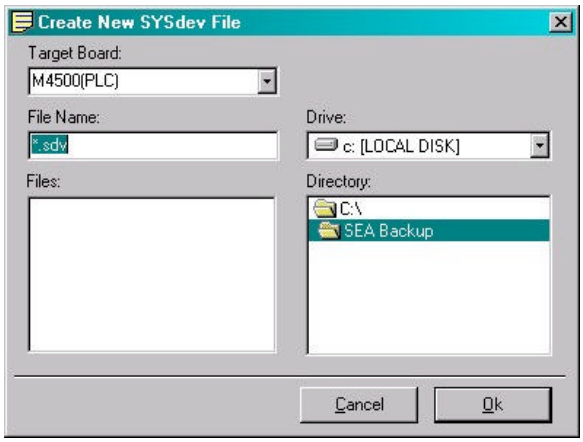
4) The "**Create New SYSdev File**" window will be shown. This allows the user to select a "**Target Board**" type, enter a "**File Name**" and set the location (Drive and Directory) to upload the **PLC** program.



5) From the "**Target Board"** dropdown box, select the appropriate **PLC** target board.
6) Enter a "**File Name**". This would generally be the name (Ident) of the program currently running in the controller, however it can be anything the user chooses. A "Short File Name" will be used if the "File Name" exceeds **8 characters** in length.
7) Using the "**Drive**" and "**Directory**" boxes, navigate to the location to upload the program and then click **OK** to continue.
8) A message box will be displayed confirming the user's choice to upload the PLC program. Click the **Yes** button to continue.
9) This will initiate the "Upload" process, reading the entire program memory space of the processor. This will take several minutes as this function is performed while the program is running and the machine is in operation.
10) As the program is being uploaded, the current program memory address being read is displayed. A message box will be displayed when the upload is complete. If an error occurs during the upload, a message box will be shown indicating the problem. In either case click the **OK** button to continue.
11) Once program upload is complete the file navigation pane to the left will be refreshed with the focus on the uploaded SYSdev program and showing the list of the associated "Files". In the listing of the associated "Files", the Target Board "Type" will be shown in brackets [ ] next to the parent name of the file.

To "Upload" the User Data memory from an SEA processor, perform the following:

This function reads the entire data memory space of the controller and can be performed as necessary to create a backup of the user setup parameters, production data, etc. During this process the existing "DATA (.LDT)" file is overwritten or created new.

Note: An RS-232 cable must be connected from the programming device to the **PROG** port of the SEA processor. ALL "Upload" functions CAN be performed while the machine is in production.

1) From the Windows **Start** menu, select **Programs >> Systems (folder) >> SYSView**.
2) The SYSView splash screen will be displayed. **Click** the screen with the mouse or press **Enter**.
3) On the left hand side is displayed the file directory navigation. Use this to navigate to the "**Drive**" and "**Directory**" to select a **SYSdev** PLC type program file. A "Double-Click" to the folder of the Directory selection will open it and display the contents.
4) Click on the program with the mouse to select and high-light the name and display the "Files" associated with the program. In the listing of the associated "Files", the Target Board "Type" will be shown in brackets [ ] next to the parent name of the file.
5) Using the tool bar at the top of the screen, click on the "**Upload**" button. 

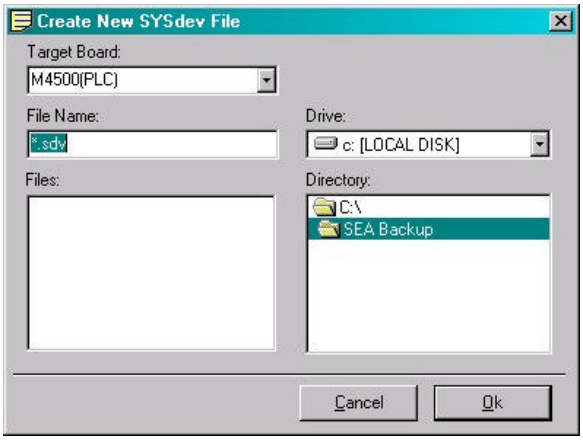
6) This will display a "**Data Upload**" message box, asking the user to confirm their choice to perform a data upload to the selected file. Click on the **Yes** button to continue.
7) This will display the "**Target Board Data Upload**" dialog box. Note the name of the associated SYSdev file in the title bar of the box. Select the option for "**Standard**" and "Click" **OK** to continue. This will initiate the data upload process.
8) The value and address of the data being read will be shown along with the progress of the upload. This box will close once the upload is complete. The user can "Click" the **Cancel** button at anytime to halt the data upload process.

To "Upload" the "Timing Channel Setpoints" (separate PLS file) from an SEA processor, perform the following:

This function reads the PLS configuration and timing channel setpoints from a programmable limit switch controller. During this process the existing "PLS Config (.PCF)" and "CHANNEL (.CHL)" setpoint files are overwritten or created new.

Note: An RS-232 cable must be connected from the computer to the PLS **CHAN** port of the intelligent PLS. The **M4500** processor utilizes the same PROG port for access to both the PLC and PLS. ALL "Upload" functions CAN be performed while the machine is in production.

1) From the Windows **Start** menu, select **Programs >> Systems (folder) >> SYSView**.
2) The SYSView splash screen will be displayed. **Click** the screen with the mouse or press **Enter**.
3) If a timing channel setpoint file does NOT exist then:
   a) From the **File** menu select "**Upload PLC/PLS Program**".
   b) The "**Create New SYSdev File**" window will be displayed. This allows the user to select a **PLS** type "**Target Board**", enter a "**File Name**" and set the location (Drive and Directory) to upload the PLS timing channel setpoints.



   c) From the "**Target Board"** dropdown box, select the appropriate **PLS** target board.
   d) Enter a "**File Name**". This can be anything the user chooses, however, a "Short File Name" will be used if the "File Name" exceeds **8 characters** in length.
   e) Use the "**Drive**" and "**Directory**" boxes to navigate to the location to upload the PLS timing channel configuration and setpoints. Then click **OK** to continue.
   f) This will display the "**PLS Upload**" message box, asking the user to confirm their choice to perform an upload of the PLS configuration and timing channel setpoints to the selected file. Click on the **Yes** button to continue.
   g) This will initiate the PLS "Upload" process, reading the configuration and timing channel setpoints. Depending on the number of setpoints programmed, this might take several minutes to complete.
   h) As the timing channels are being uploaded, the current channel and setpoint being read is displayed. If an error occurs during the upload, a message box will be shown indicating the problem.
   i) Once PLS program upload is complete the file navigation pane to the left will be refreshed with the focus on the uploaded PLS program the listing of the associated "Files" shown. In the listing of the associated "Files", the Target Board "Type" will be shown in brackets [ ] next to the parent name of the file.

4) If a timing channel setpoint file DOES exist, the user can upload the PLS timing channel setpoints and configuration to this file by performing the following:
   a) On the left hand side is displayed the file directory navigation. Use this to navigate to the "**Drive**" and "**Directory**" to select a **SYSdev** PLS type program file. A "Double-Click" to the folder of the Directory selection will open it and display the contents.
   b) Click on the program with the mouse to select and high-light the name and display the "Files" associated with the program. In the listing of the associated "Files", the Target Board "Type" will be shown in brackets [ ] next to the parent name of the file. Make sure to select the file with the appropriate associated **PLS** target board.
   c) Using the tool bar at the top of the screen, click on the "**Upload**" button. 

   d) This will display the "**PLS Upload**" message box, asking the user to confirm their choice to perform an upload of the PLS configuration and timing channel setpoints to the selected file. Click on the **Yes** button to continue.
   e) This will initiate the PLS "Upload" process, reading the configuration and timing channel setpoints. Depending on the number of setpoints programmed, this might take several minutes to complete.
   f) The progress of the current channel and setpoint is displayed as the timing channels are uploaded. If an error occurs during the upload, a message box will be shown indicating the problem.
   g) Once PLS program upload is complete the file navigation pane to the left will be refreshed with the focus on the uploaded PLS program the listing of the associated "Files" shown. In the listing of the associated "Files", the Target Board type will be shown in brackets [ ] next to the parent name of the file.

5) Double-Click on either the channel setpoint file (.CHL) or the PLS configuration file (.PCF) to display the contents.