

PRINTING



In This Chapter...

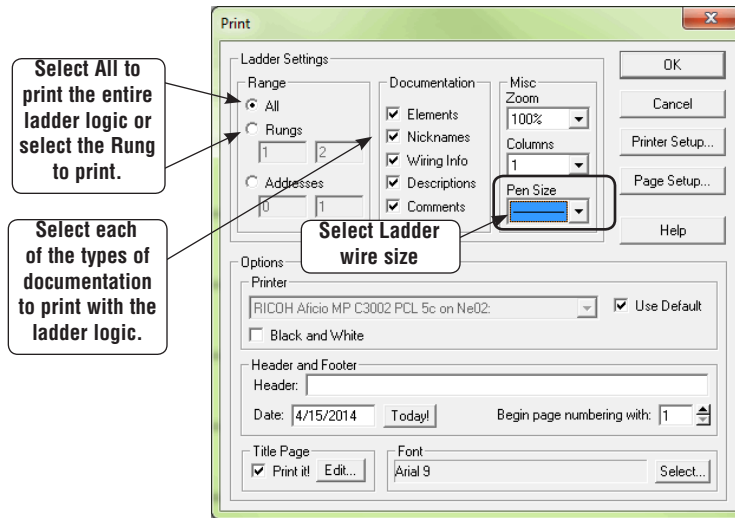
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Print the Current View

A printout of the program can be very useful when developing a program. A printout will provide a full view of whatever view is displayed in the *DirectSOFT6* programming window.

Print the Ladder View

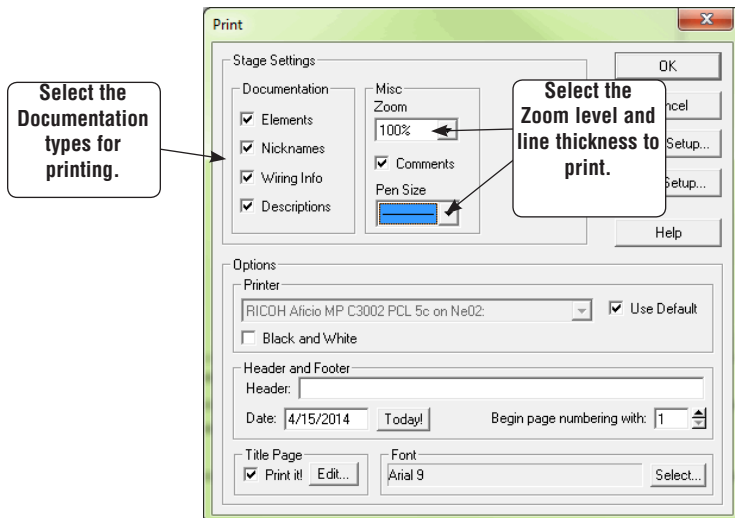
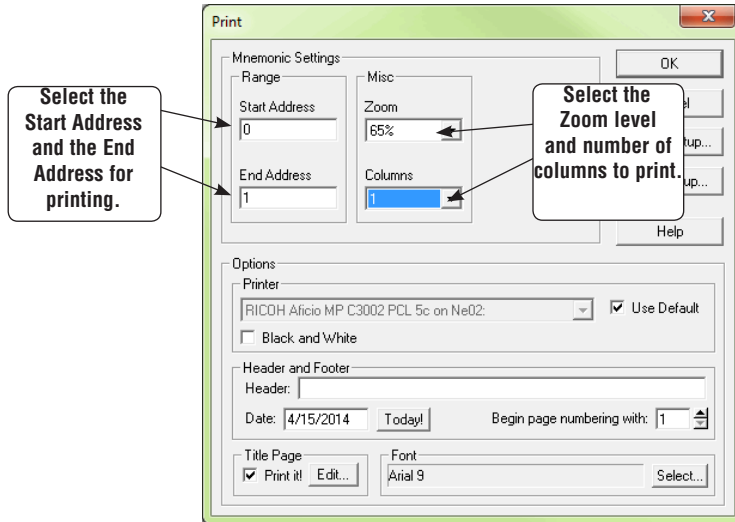
To print the Ladder View, use the **Print** dialog to select the printing options. To open the Print dialog either select **File > Print** on the Menu bar, press the **Print** button on the File toolbar if it is displayed or use the keyboard shortcut **Ctrl + P**. The Print dialog will appear like the one shown below.



In this dialog, you can set the range to print all or any part of the ladder logic by either selecting **All**, **Rungs** or **Addresses** to be printed. Select any or all of the ladder documentation to print with the ladder logic. The **Miscellaneous** settings allows the level of zoom to print and the selection of the number of columns to print, also, the **Pen Size** allows the selection of the thickness of the pen used to draw wires, contacts, coils and boxes on high resolution printers.

Other Print Views

There are three additional current view print dialogs, Mnemonics, Stage and Cross Reference. Each dialog is a bit different than the Ladder dialog as noted in the following diagrams. Each view must be enabled (current view in the programming display) to open the Print Views.



Cross Reference Print Dialog

The screenshot shows the 'Print' dialog box for Cross Reference Settings. It is divided into several sections:

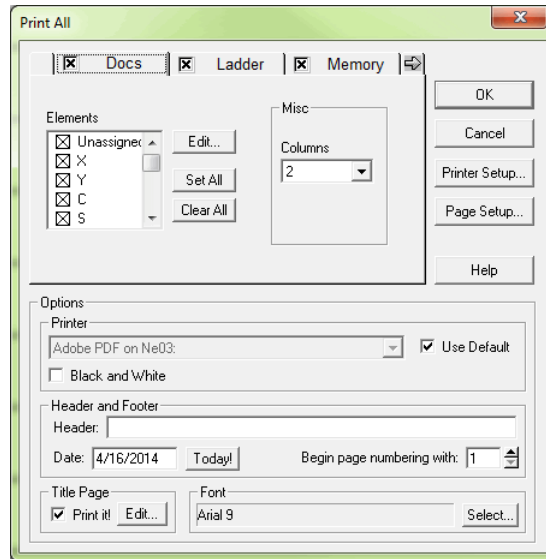
- Cross Reference Settings:**
 - Elements:** A list of elements with checkboxes: Unassigned, X, Y, C, S. Buttons for 'Edit...', 'Set All', and 'Clear All' are present.
 - Columns:** A dropdown menu currently set to '2'.
 - Documentation:** Checkboxes for 'XRef' and 'Usage' are checked. Below them are checkboxes for 'Elements', 'Nicknames', 'Wiring Info', and 'Descriptions', all of which are checked.
- Options:**
 - Printer:** A dropdown menu set to 'Adobe PDF on Ne03' with a 'Use Default' checkbox checked.
 - Black and White:** An unchecked checkbox.
 - Header and Footer:** A 'Header:' text field.
 - Date:** A field showing '4/16/2014' with a 'Today!' button.
 - Begin page numbering with:** A field showing '1'.
 - Title Page:** A checked 'Print it!' checkbox and an 'Edit...' button.
 - Font:** A field showing 'Arial 9' and a 'Select...' button.

Callout boxes provide the following instructions:

- Edit the range of the current element.** Points to the 'Edit...' button in the Elements section.
- Set All enables (checks) all elements.** Points to the 'Set All' button in the Elements section.
- Clear All disables (Unchecks) all elements.** Points to the 'Clear All' button in the Elements section.
- Select the Elements to print the xref for.** Points to the 'X' checkbox in the Elements list.
- Select the number of columns to use for printing XRef/Usage printouts.** Points to the 'Columns' dropdown menu.
- Check to include the XRef printout and select the documentation to be printed.** Points to the 'XRef' checkbox and the 'Documentation' section.
- Check to include the Usage printout and check the options to be printed.** Points to the 'Usage' checkbox and the 'Documentation' section.

Print Multiple Views

The advantage of using the **Print All** dialog is that all of the available print views are available using one dialog. Open the dialog by either selecting **File > Print All** on the Menu bar or press the **Print All** button on the File toolbar if it is displayed. The following dialog will appear.



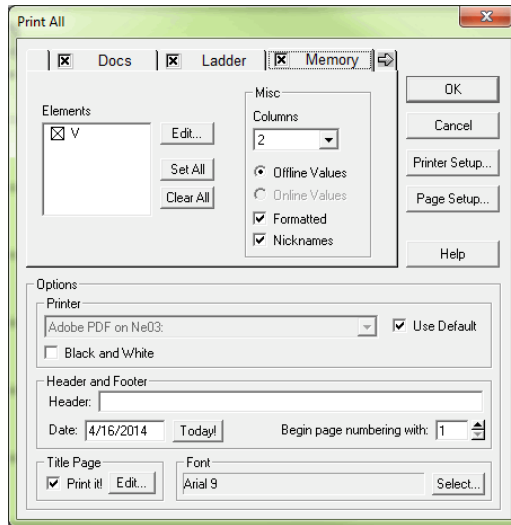
The tabs located at the top of the dialog are used to select the print dialog and printout setup. Click on the tab to select the print view. The print views available when the Print All dialog is opened are: Documentation, Ladder and Memory. Clicking on the “right arrow” on the dialog will move the Mnemonics, Stage and XRef tabs into view. Select the views to be printed by checking the check box next to the view named on the tab. The use for all of the available views has been explained with the exception of the Docs and Memory tabs seen in the Print All diagram.

Docs tab – check the elements for which to print documentation

Elements

- **Edit** – edit the range of the current element.
- **Set All** – enables (checks) all elements to print.
- **Clear All** – disables (unchecks) all elements to print.

Memory tab – check the V-memory addresses to print the desired values.



Elements

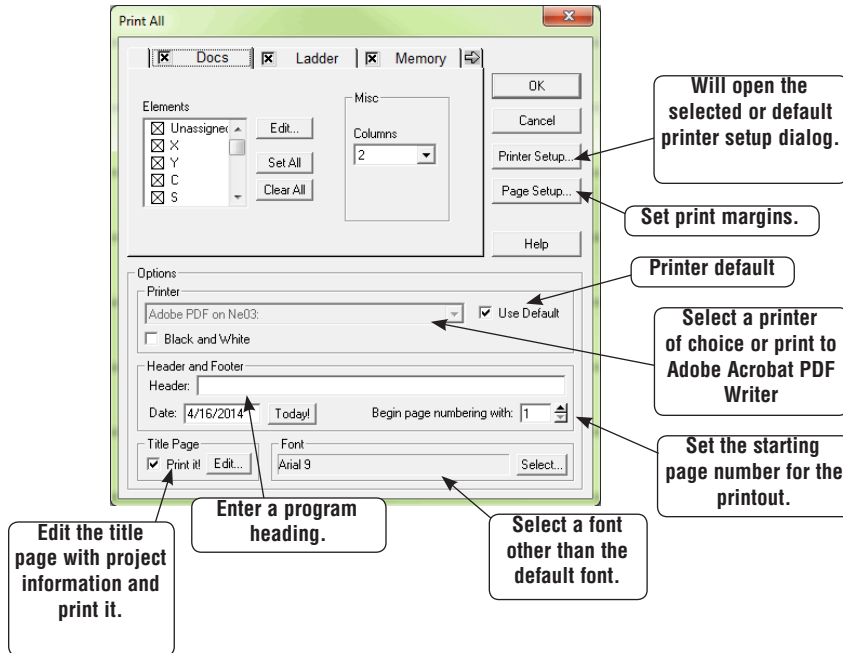
- **Edit** – edit the V-memory range.
- **Set All** – enables (checks) all V-memory to print.
- **Clear All** – disables (unchecks) all V-memory to print.

Miscellaneous

- **Columns** – select the number of columns to use for the V-memory printout.
- **Online / Offline Values** – select whether online data or offline data is to be printed.
- **Formatted** – use previously saved format information rather than raw data.
- **Nicknames** - check this to show nicknames instead of element ids.

Print View Common Setup

The **Printer Setup**, **Page Setup** and **Options** are common to all of the Print Views.

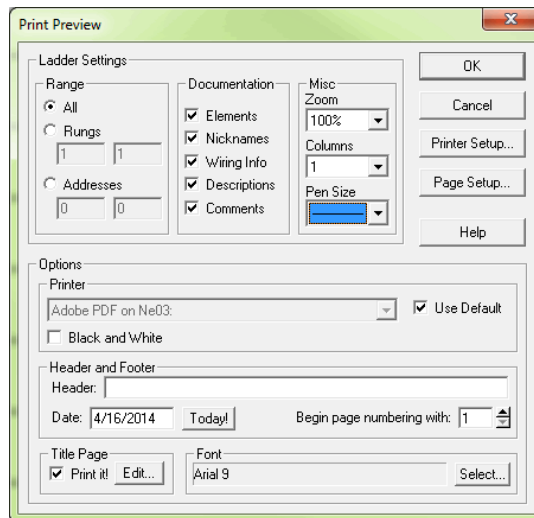


Using Print Preview

Print Preview is available and is recommended before printing the program. One advantage for using Print Preview before printing is saving printer paper. You will be able to see how the program will appear on paper before it is printed, and corrections can be made before printing.

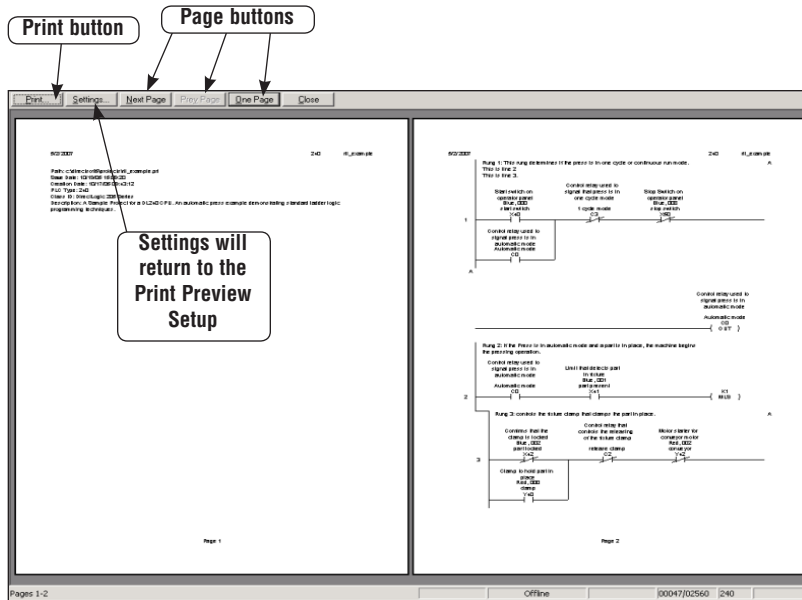
Print Preview Setup

Either open the Print Preview dialog from the Menu bar using **File > Print Preview** or press the **Preview** button on the File toolbar if it is displayed. Notice that the Print Preview dialog is the same as the Print dialog. The Print Preview is setup in the same manner as the Print dialog, Use the dialog to setup the printer, the page margins, setup the rest of the print options then press **OK**.



Print Preview

After pressing the OK button, the Print Preview will appear using the full computer screen. Use the **Page** buttons at the top of the display to scroll through the program. **One Page** can also be selected and switched back to two page when desired. If the displayed program does not appear the way you want to, press the **Settings** button to return to the setup to make corrections. Once the program preview looks the way you want it to look, press the **Print** button.



Print Troubleshooting

Parts of Program not Printed

If the program looks good in Print Preview but some parts do not appear on the program printout, there may be a problem with the color setup. When generating the data sent to the printer, *DirectSOFT6* will attempt to make the program printout look as close to the on-screen version as possible, including the colors. If a color printer is being used, there probably isn't enough contrast between the background and whatever is being printed. If the printer is black and white, the same lack of contrast could be the problem because *DirectSOFT6* will try to generate grayscale colors to match the display colors.

One way to solve this problem is to tell *DirectSOFT6* to use monochrome (black and white) for display. If the **View** toolbar is displayed, press the **Color** button, otherwise, go to **View > Color Setup** and click on the **Monochrome** button, then press **OK**. After printing is complete, you can return to the Color Setup dialog to restore the original setting.

Program Prints “Garbage”

As a general rule, if the Ladder View looks correct in Print Preview but the program printout shows “garbage”, the first thing to suspect is the printer driver being used. Look on the printer manufacturer's website for the latest driver for the printer, then download it and install it on the computer. Once this is done, print one page of the program in Print Preview to be sure that the problem has been corrected.

DirectSOFT6 Crashes

If *DirectSOFT6* crashes whenever **Print** or **Print Preview** is selected, there may be a corrupted printer setting file in *DirectSOFT6*. Each project has a printer settings file that is generated whenever a new project is created. It will reside in the project folder, and will have an extension of **.prt**.

To correct this, close *DirectSOFT6* and delete this file by using Windows Explorer. Reopen *DirectSOFT6* and try the print operation again.

Another reason for *DirectSOFT6* crashing whenever **Print** or **Print Preview** is selected may be from corrupted global printer settings files. There are two files located in *DirectSOFT6*\Program\Bin sub-folder named **PrntSrv.rst** and **Program.opt**. These files can be deleted from the directory after closing *DirectSOFT6*. Locate the two files by using Windows Explorer. After deleting the files, reopen *DirectSOFT6* and try the print operation.

Print Setup Dialog

The **Print Setup** dialog deserves to be mentioned. Print Setup can be invoked by either using **File > Print Setup** or pressing the **Print Setup** button on the File toolbar. The dialog that appears will be the **Properties** dialog for the printer being used. If necessary, printer settings can be made here as well as choosing the page layout which includes Landscape and Portrait orientation.

