Step 6: Using the Box Browser You are now ready for the output element on this rung. Move the cursor to the end of the rung to position where you want the element placed. Placing data in memory is a two step operation. First, load the data in the CPUs accumulator and then output it into memory. To accomplish this, *two output elements* will be placed on this rung. Start by entering the box instruction **Load Accumulator** that will load data into the accumulator. Once the cursor is positioned, click on the **Box** icon of the **Tool Palette**.



Step 7: Scrolling the Box Class Window

The box instruction to use for a DL105/DL205/DL405 is LD. This is found in the Accumulator class of the box instruction set shown in the Box Setup of the Instruction Browser that appears when you click on the Display Box Setup icon of the tool palette. With Accumulator/Stack and LD selected, click on OK.

Step 8: Now you see an input window that is very similar to the one used for entering the SP0 relay. It is waiting for you to type in the number to load in the Accumulator (recall from the program that you are using this first rung to enter the preset for the timer).

In this case use the number 10 as the preset. You will enter **K10** (where the **K** means **constant**). Again the green/red indicator inside the box will prompt you on whether or not you have made a valid entry. It glows green if it is correct. Click on (\checkmark) when you have typed in **K10** and you "have the green light".

Step 9: Connecting Elements in Parallel You are now ready to add a second box for this rung. It is going to be connected in parallel, therefore, you will need to add a vertical connecting line. With the highlight on the first box, hold down the control key and then press the down arrow (**CTRL + DOWN ARROW**). This draws the connecting line you need. You could have also performed the same thing from the upper menu bar by selecting: **Edit/Wire/Down**. However, the arrow keys are faster.

Make sure the cursor is on the top element before starting your vertical line.

Step 10:With the cursor at the end of the line that you have created, select the Box icon fromInserting an OutputWith the cursor at the end of the line that you have created, select the Box icon fromBoxInstruction Browser. Select OK when you have highlighted the OUT function.

Step 11: Entering the Address to Hold the Preset Now you need to enter the address into which you are outputting the accumulator data. Use **V2000** in this example (**V** means "**variable**" memory).

When you have entered the **V2000**, click on the check mark (\checkmark). The new **OUT** function block should now be in place as shown below.

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Step 12: Enabling the Documentation Options You could stop with this particular rung at this point and go onto the next rung of our program. But in this example the idea is to make the program a little clearer to anyone who may look at it later. To accomplish this, you are now going to learn how to enter **comments** and **nicknames** for the program. Start by clicking on <u>View</u> from the menu bar at the top. Then select <u>Options</u>. An options menu appears (see below). Make sure nicknames and comments have been checked to ensure they will be displayed on the screen once entered. Select the boxes next to **Nicknames** and **Comments** to enable these options. Select **OK** when finished.

Step 13: Entering a Comment First insert a comment above the rung. To do this, you can pull down the menu from **Tools**, then select **Comment Editor** (Hotkey=**CTRL + K**). Either of these methods will display the **Edit Comments** dialog box shown below.

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Now type in the comment you want and click on **OK**.

As a result, you end up with the comment shown above the rung like this:

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