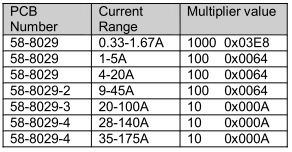
How To Use the C440 Add-On Instructions

Below is a procedure on how to import an Add-On Instruction and use it in an RSLogix5000 project.

Before importing the Add-On Instruction, add the C440 to the Ethernet network in RSLogix5000 using the C440 EDS files. These files can be found on the Eaton website. They are also included in the zip file with the Add-On Instruction. This AOI does also work with the Generic Ethernet Module is RSLogix5000.

The C440 has 3 different Current Scale Factors depending on the size of the C440. The Current Scale Factors associated with each C440 are listed below.



The C440 Add-On Instructions provide the currents in floating point format. These programs take care of the scaling, so there are 3 Add-On Instructions for the C440 using Input Assembly 130 and Output Assembly 105.

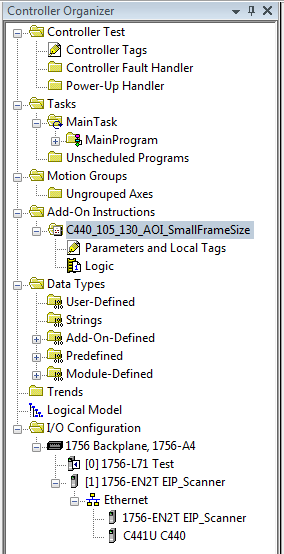
0.33 – 1.67A units use AOI: C440\_105\_130\_AOI\_SmallFrameSize.L5X

1-5A, 4-20A and 9-45A units use AOI: C440\_105\_130\_AOI\_MediumFrameSize.L5X

20-100A, 28-140A and 35-175A units use AOI: C440\_105\_130\_AOI\_LargeFrameSize.L5X

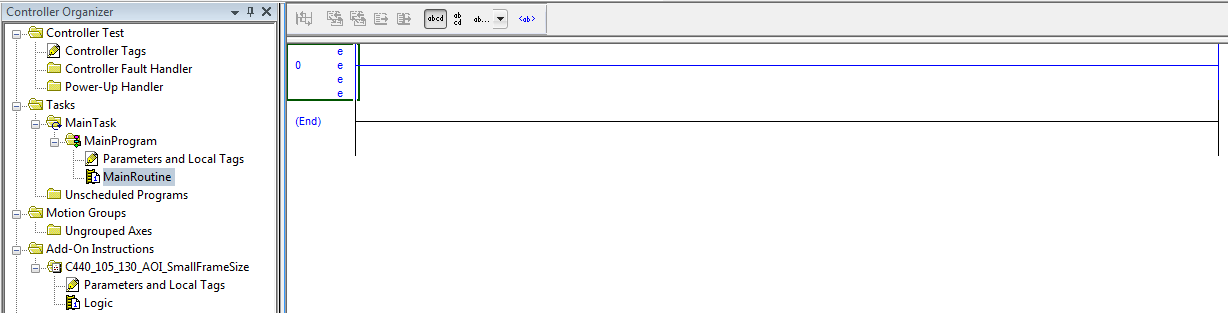
To use the C440 Add-On Instruction, open the RSLogix5000 project where it will be used. First, the C440 needs to be added to the project/Ethernet network under Ethernet at the bottom of the Controller Organizer. Then Import the AOI and add it to your program as described below.

Right click on Add-On Instructions on the Controller Organizer tree on the left of the screen and select Import Add-On Instruction. Locate the Add-On Instruction on your computer and select Open. Click OK to the next window. The tree in RSLogix5000 should look like the following:

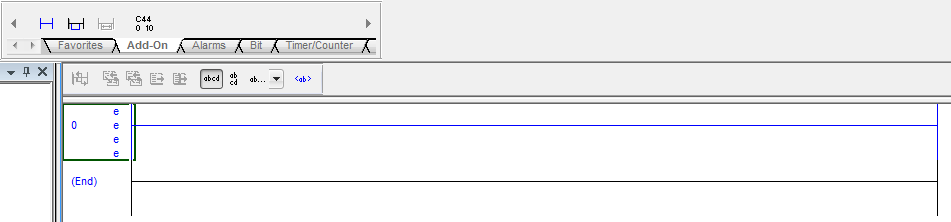


The parameters, tags and logic for this Add-On Instruction are available to view under C440\_105\_130\_AOI\_SmallFrameSize for this example.

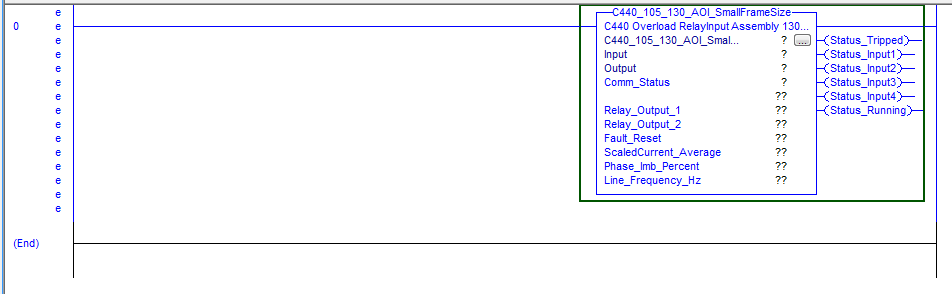
To add this Add-On Instruction to the Main Routine, open the Main Routine as shown below:



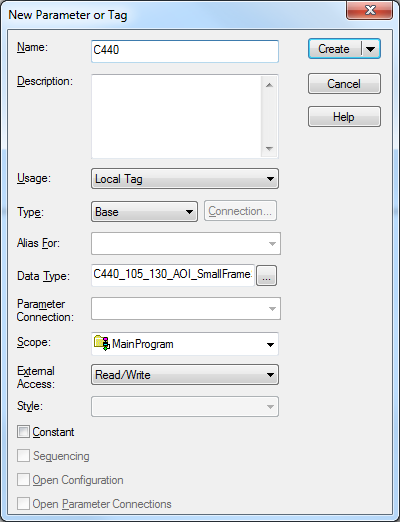
In the area above where logic is entered are all of the available instructions. Select the category called Add-On and the C440 Add-On Instruction will be displayed above, as shown below.



Select the C440 AOI to add it to your program as shown below.

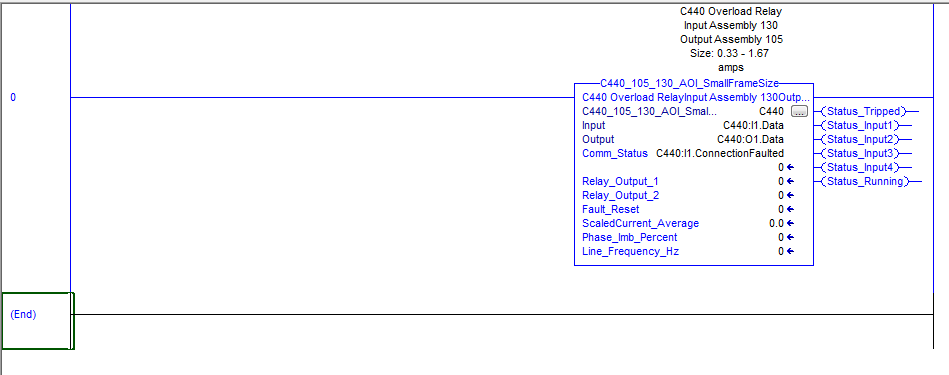


Right click the ? associated with “C440\_105\_130\_AOI\_Small…” and enter a name for this AOI block in the ‘New Tag’ window. The name must match the name given for the C440 under the ‘Ethernet’ network at the bottom of the Controller Organizer in RSLogix5000. For this example, C440 is used. Select the Create button.

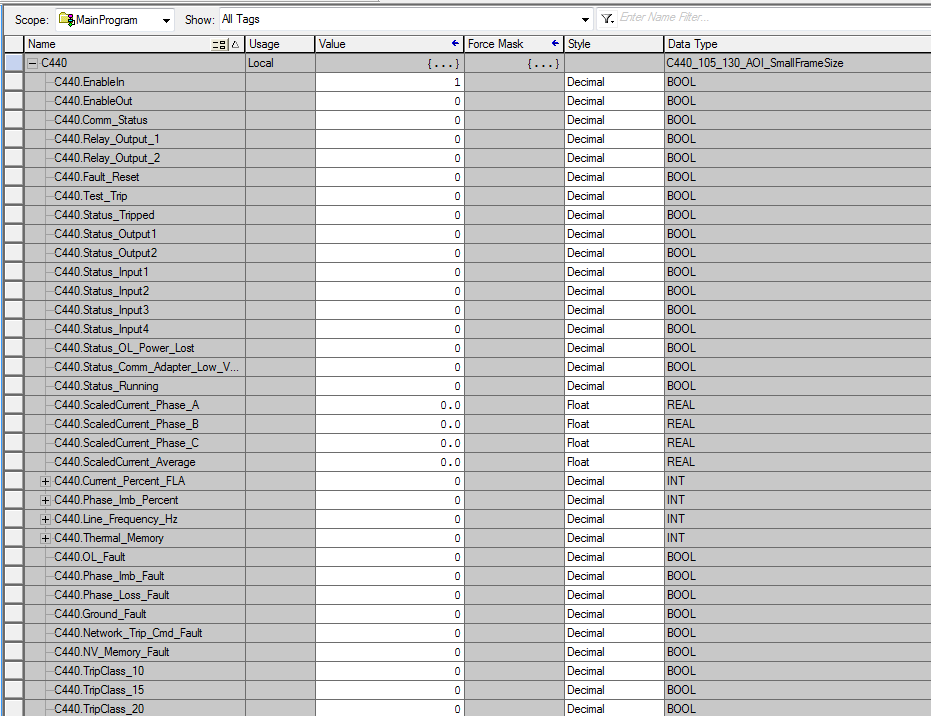


Be sure all fields have the selections shown above, then select Create. The Scope represents where the tag file will be located. If MainProgram is used as it is above, the tags will be under the MainProgram/Parameters and Local Tags. If the other choice is made (Project Name), then the tag file will be located under ‘Controller Tags’.

Add the Input and Output addresses by double clicking the ? next to each one and select the addresses as shown below. Also, under the Input tag category is C440:I1.ConnectionFaulted. This is a BOOL tag that is a 1 if the connection is lost to the C440 and a 0 if the connection is good. Monitor this bit for connection status for the C440 by assigning it to the “Comm\_Status” tag shown below the I/O tags.



The information for the Add-On Instruction will then be displayed and the instruction is now included in your logic. Specific tags were selected to be displayed in the instruction, but all I/O tags are now available to be used in the program. All the Input and Output tags are shown below. They correspond to the tag names documented in the Ethernet user manual (publication MN04200002E) in the C440 section, for Input assembly 130 and Output assembly 105. They are located in the Parameters and Local Tags area under MainProgram in the RSLogix5000 project for this exsample.



The Logic area for the Add-On Instruction associates the generic I/O tags RSLogix5000 creates with the descriptive tags shown above. These generic I/O tags are created when a device is added to the Ethernet network. The generic I/O tags can be found in the Controller Tags area.

The descriptive tags shown above may now be used to control and monitor the C440.

To display additional tags in the actual Add-On Instruction, right click on the “C440\_105\_130\_AOI\_xFrameSize” under Add-On Instructions and select “Open Definition”, then the “Parameters” tab. Under the Vis (visibility) column, select any tags you wish to display in the AOI block and be sure to select the Apply button. This can only be done offline.

The AOIs are not protected and may be modified as needed. But caution should be taken when making any changes.