

# How to setup and run RSLogix Emulation (SLC 500, Micrologix 1000)

Monday, April 07, 2014  
11:12 AM

## Original Instructions:

<http://www.plcdev.com/book/export/html/622>

## Download Links:

<http://www.ab.com/programmablecontrol/plc/micrologix/downloads.html> \*NO!  
<http://www.rockwellautomation.com/support/plc/micrologix.page>

RSLink Lite

<http://www.rockwellautomation.com/resources/downloads/rockwellautomation/zip/support/drives/RSLinxClassicLitev2.57.exe>

RSLogix Micro Starter Lite

[http://files.rockwellautomation.com/Public/Micro\\_Lite\\_830.zip](http://files.rockwellautomation.com/Public/Micro_Lite_830.zip)

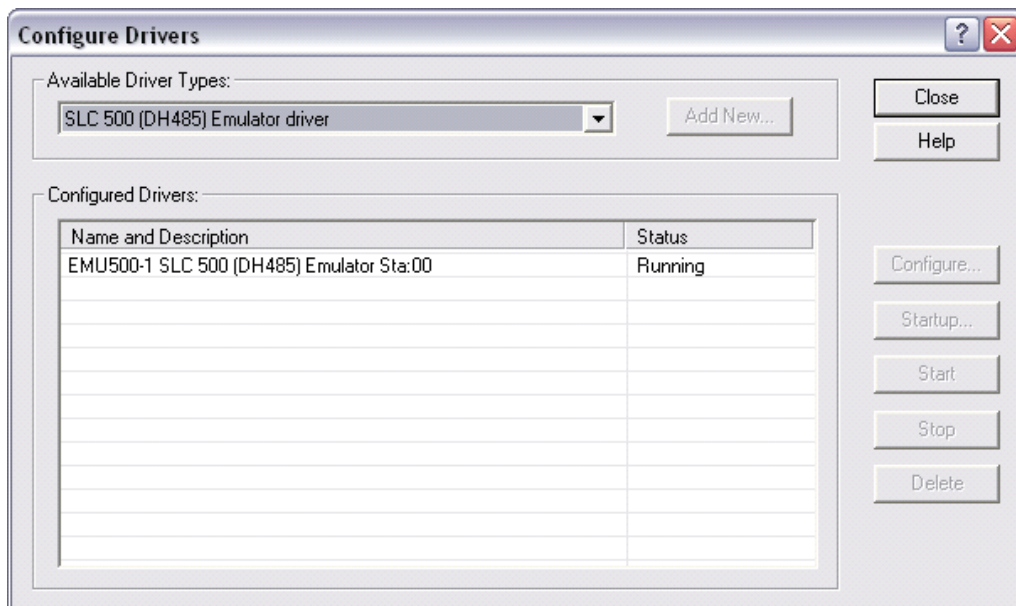
RSLogix 500 Emulator

[http://mms.rockwellautomation.com/idc/groups/multi\\_media/documents/multimedia/rsemulate500.zip](http://mms.rockwellautomation.com/idc/groups/multi_media/documents/multimedia/rsemulate500.zip)

Setup RSLinks: (Taken from original instructions)

1. Under the Communications menu select Configure Drivers.
2. Under the Available Drivers Types select the SLC 500 (DH485) Emulator driver and click the Add New button.
3. You can give the driver a name but I just leave it at the default of EMU500-1.
4. Leave the configuration options as Station Number 00 and click OK.

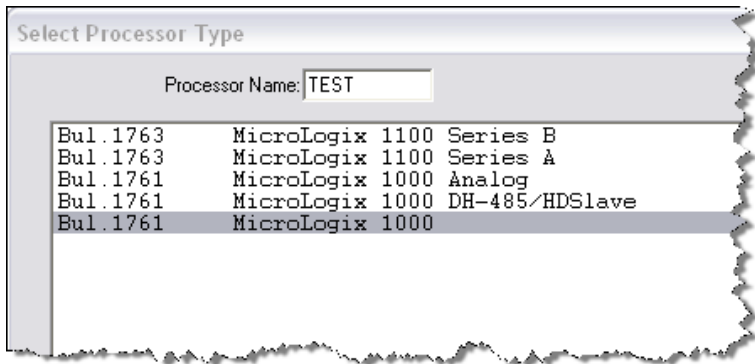
Your driver should now be running and look like the picture below.



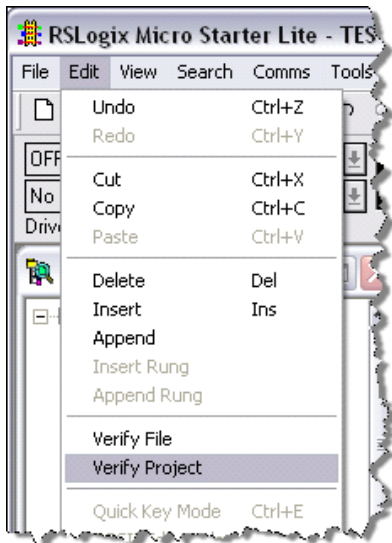
Close the Configure Drivers dialog box and close RSLinx. Actually RSLinx is now running in the background and you'll probably see its little icon in the system tray.

## Setup RSLogix Micro Starter Lite:

Create a new program.



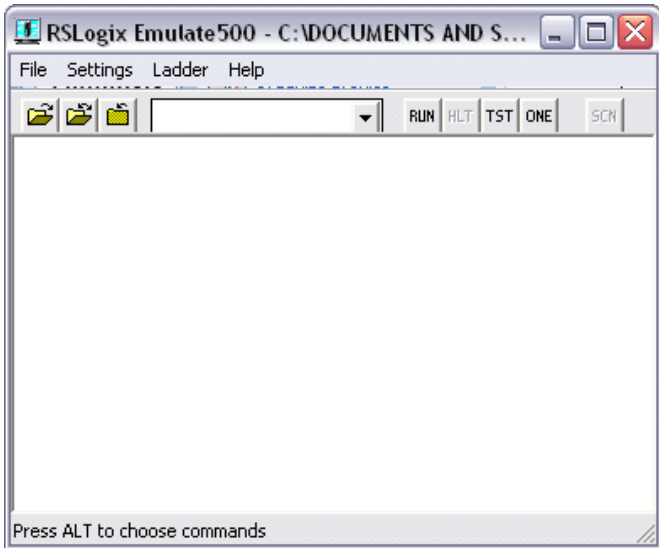
**The next very important step is to verify the project with the Edit > Verify Project menu item. This will compile the project and get it ready for the emulator.**



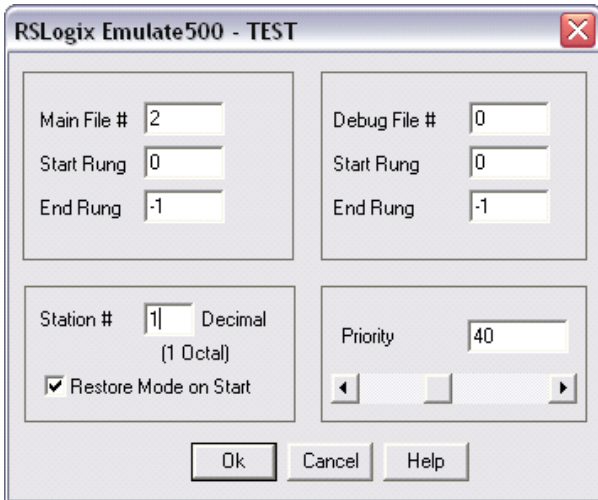
Save the project as something like Test.RSS in an easy place to find like My Documents.

## RSEmulator 500

The emulator lets us test our work by running a virtual PLC. We'll be able to download our program to it and run it in a very similar fashion to a real PLC. Start the emulator with the *START > All Programs > Rockwell Software > RSLogix Emulate 500 > RSLogix Emulate 500* shortcut. The emulator is pictured below. I know. It doesn't look like much but it gets the job done.



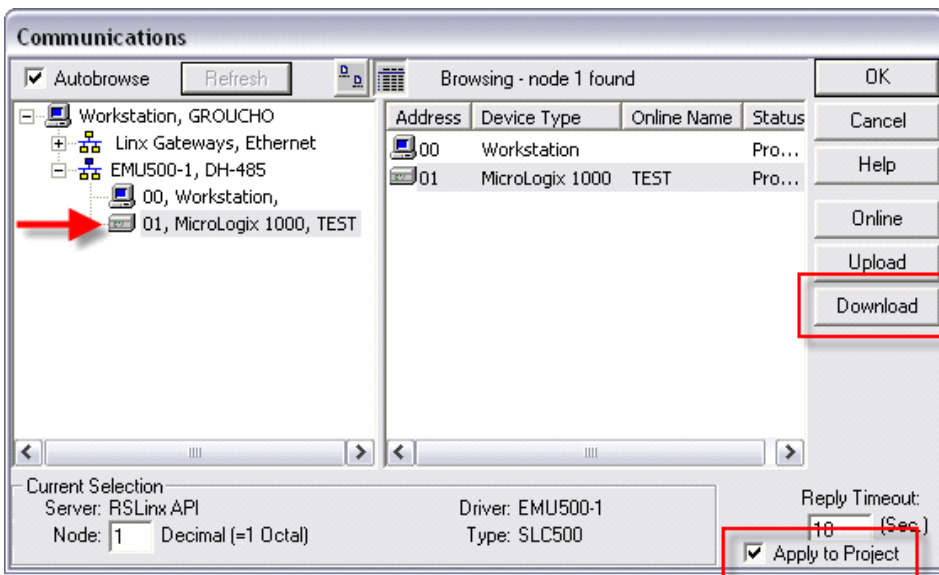
Select *File > Open* and open the RSLogix project you created earlier (I named mine TEST.RSS). In the dialog box that pops up put the Station # as 1 and click *OK*.



Believe it or not but the emulator is now ready. Leave it running and go back to your project in RSLogix Micro.

### Testing the Ladder Logic:

In RSLogix Micro Starter select the *Comms > System Comms* menu item. The following dialog box will pop up.

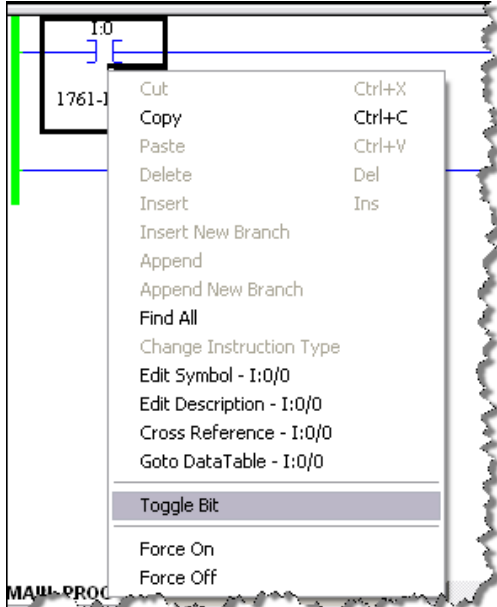


In the left hand pane, drill down and select the 01, MicroLogix 1000, TEST processor. Yours might look a little different if you selected different hardware or gave the processor a different name. For good measure make sure *Apply to Project* is checked and then click on [Download](#). When prompted to go Online click on Yes.

If successful you'll see the ladder picture spinning round on the online toolbar. To scan the ladder logic put the processor into Run mode by clicking on the arrow to the right of mode status (REMOTE PROGRAM).



To test the ladder logic, change the input state by right clicking on the address and selecting toggle bit.



You will see the instruction go green indicating it is true and it will make the output instruction turn green also indicating the output is turned on. That's it! You get all that for the cost of a download. Now break out the manuals and start learning about all the different instructions.