

Arcus ACE-SDE Controller Installation Notes.



1. The controller model name is ACE-SDE.
2. Unplug the USB cable from the ACE-SDE controller during software installation.
3. Install “Arcus Drivers and Tools Setup 1.10.exe”, first.
4. Install “ace installation 1.53.exe”, second.
5. Plug the USB cable into the ACE-SDE controller and turn on power, wait for drivers to load.
6. Run the “Soft Exe ACE SDE 224” program from the black desktop icon.

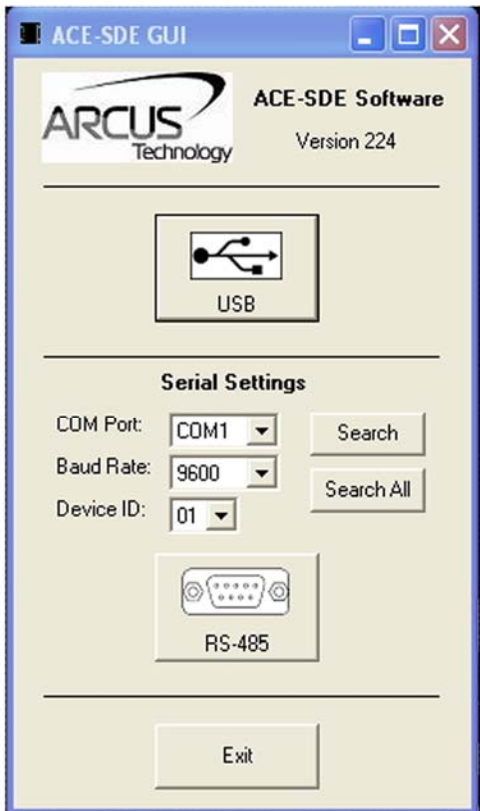


7.

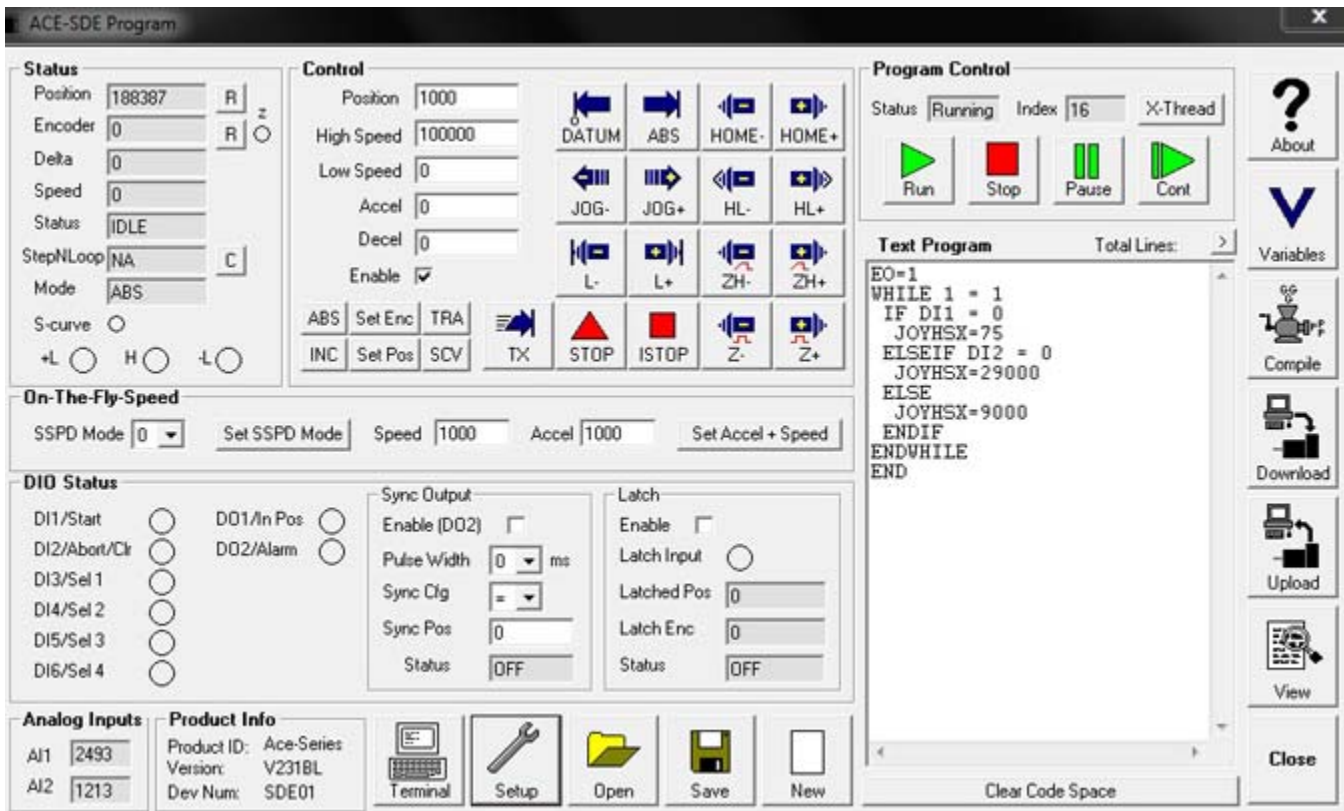
Click on the USB Icon.

Highlight "sde01, Index=0".

Click OK.



8. The main menu screen will appear.



When the Thumb Wheel is moved the values in the AI1 Box, under Analog Inputs, will change from 0 to 5000 indicating the analog voltages of 0-5 VDC.

This indicates the Thumb Wheel is working.

Under the DIO Status Window, DI1 or DI2 will change color when the Speed Switch is changed to either Low or High Speed.

This indicates these inputs are working.

The white box, under Text Program will normally be blank, but populates once the “Main” program is loaded.

The picture above shows the program as loaded, but before this step is performed the “Setup” program should be loaded.

Click on the Setup Icon.

9. The setup menu screen will appear.

The screenshot shows the 'ACE SDE Setup' dialog box with the following settings:

- Polarity/Setup:** Dir (Low), Home (Low), Limit (Low), Latch (Low), Z Index (Low), Encoder (1X), Output (Low), Input (Low), SA Err (Low), Enable (Low).
- Communication Setup:** Baud Rate (9600), Device ID (01), Time-out Counter (0 ms), ID appended to response (unchecked).
- DIO Control:** Enable (unchecked), DIO Control Setup button.
- Step N Loop Control:** Enable (unchecked), Ratio (1.000), Max Attempt (10), Tol Range (10), Error Range (1000).
- Misc Settings:** Enable Decel (unchecked), RZ (unchecked), Auto Run 0 (checked), IERR (checked), Auto Run 1 (unchecked), EO Boot (0), LCA (1000), DO Boot (0), HCA (1000).
- Driver Settings:** uStepping (16), Idle Curr (400 mA), Idle Time (1 c-sec), Run Curr (1500 mA).

Buttons at the bottom: Open, Save, Upload, Down, Store, Close.

Navigate to the “MVR200 Joystick SetupAAA.par” program, click on the file.

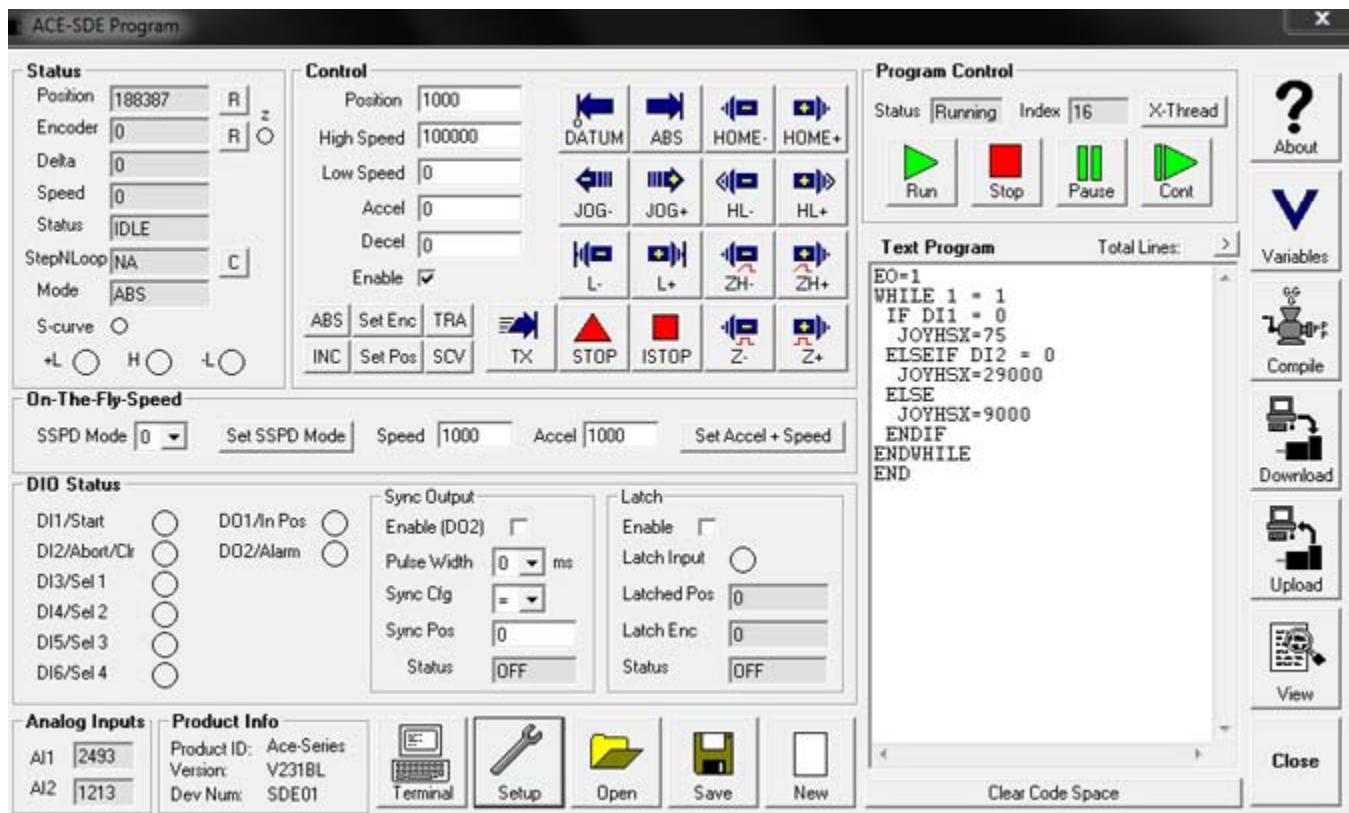
Check to see that the following Boxes populate with the values shown above: Joystick Control, Misc Settings, Driver Settings, Polarity/Setup.

Click on Write, within the Driver Settings to download the motor settings. This must be done anytime these settings are changes.

Click on the Down Icon Box to load values or any changes, to the controller. Click on the Store Icon Box, to permanently save changes. Always Write, Down, Store all changes.

Click the Close Icon to return to the “Main setup screen”.

10. Return to the Main setup screen.



Click on the Open Icon, navigate to the “MVR200 Main Program AAA.prg”, click on the file.

The program text will appear in the white window.

Click on the Compile icon.

Click on the Download icon.

Always Compile and Download any new changes.

Click on the Green Run Icon, the status box above it will change to “running” showing the program is now running.

The Thumb Wheel should now drive the Z Stage up and down.

Click on the Close Box and close the Main Setup screen.

Cycle the power to the Arcus Controller.

The Thumb Wheel and Speed control switches should now function.

11.

References:

Arcus web site: <http://www.arcus-technology.com/>

Arcus downloads: <http://www.arcus-technology.com/support/downloads.html>

From Arcus main menu:

Support

 Downloads

 Software Installation

 DMX

 ACE

 ace installation 1.53.exe

 PMX

 Arcus Software Installation

 Arcus Drivers and Tools Setup 1.10.exe

 WVM