

# SV200 DC series Quick Setup Guide



## Requirements

To begin, make sure you have the following equipment:

- A compatible J-series servo motor with extension cables
- A small flat blade screwdriver for tightening the connectors (included)
- A personal computer running Microsoft Windows XP, 7, 8, or 10
- SVX Servo Suite software, available at [www.applied-motion.com/products/software](http://www.applied-motion.com/products/software)
- USB serial cable (included); for Ethernet drives, a CAT5 network cable is needed
- Motor power cable 3004-300-xx (standard) or 3004-305-xx (flex-rated)
- Motor Feedback cable 3004-304-xx (standard) or 3004-306-xx (flex-rated)
- For more detailed information, please download and read the SV200 DC Hardware Manual, available at [www.applied-motion.com/support/manuals](http://www.applied-motion.com/support/manuals).



## Step 1

### Connecting the Power Supply and STO

#### a) Connect the Main Power Supply.

Connect the power supply's "+" terminal to the drive's "V+" terminal.

Connect the power supply's "-" terminal to the drive's "V-" terminal.

SV200 DC series main power input voltage range is 24-60 VDC.

Note: Be careful not to reverse the "+" and "-" wire. Reversing the connection may blow the internal fuse and void the warranty.

#### b) Connect the auxiliary power supply (optional).

For keep-alive function, connect the auxiliary power supply's "+" terminal to the drive's "AUX".

Connect the auxiliary power supply's "-" terminal to the drive's "V-" terminal.

SV200 DC auxiliary power input voltage range is 12-60 VDC.

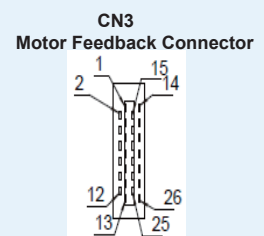
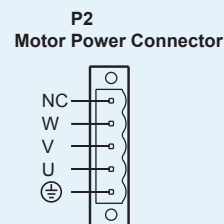
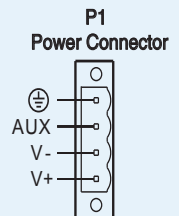
NOTE: When using the optional auxiliary power supply, the main power must be applied prior to the auxiliary power.

c) Connect Motor phase wires to Motor connector P2. Insert ferrules of wires marked U, V, and W on the motor extension cable to the corresponding P2 terminal locations.

d) Connect Motor feedback cable to connector CN3.

e) Connect pre-wired STO connector to CN4.

See Hardware Manual for more details



## Step 2

Download and install SVX Servo Suite software.

#### a) Launch the software by clicking:

Start / Programs / Applied Motion Products / SVX Servo Suite

#### b) Connect communication cable between servo drive and PC.

- For Ethernet drives, connect cable to CN7 port (CN1 connector is non-functional). The default IP address of the drive is 10.10.10.10, so a direct connection to the PC with a static IP address set to 10.10.10.11 is recommended for configuration.

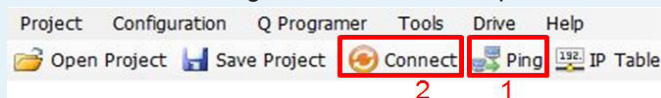
- For all other drives, connect USB cable (included) to CN1 connector. Plug in other end of cable to an available USB port on PC. The drive has a built-in USB-to-Serial converter, so the PC will identify the connection as a serial COM port.

#### c) Select appropriate communication port.

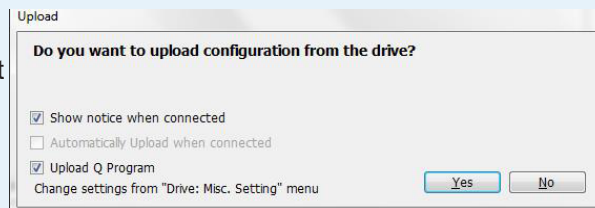
- For Ethernet, select 'Ethernet' from Port pull-down menu. Confirm IP address.
- For Serial communication, select COM port number. Check Device Manager on PC if necessary.

## Step 3

- a) Apply power to drive.
- b) Upload from Drive in SVX Servo Suite.
  - For Ethernet drives, 1st click Ping and ensure that response is received before clicking Connect.



- For all other non-Ethernet drives, the software should automatically identify the drive model number upon power up and display the 'Upload' panel.
- c) Click 'Yes' to upload the drive configuration.
- For all drives, the following 'Upload' panel will be shown by default when communication has been established between the SV200 servodrive and the SVX Servo Suite software.



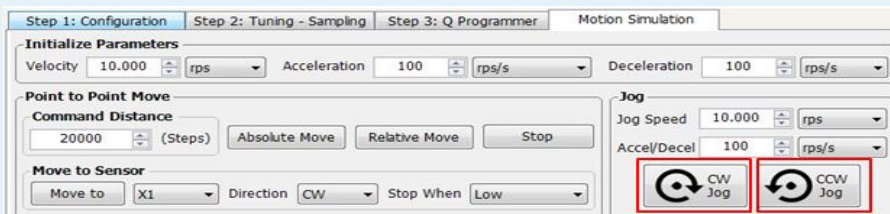
## Step 4

Set motor configuration, enable and test motion.

- a) Select motor being used by clicking 'Config' button at top of Configuration tab in SVXServo Suite and select motor from drop-down list in Motor panel. After confirming motor selection, click 'Download All to Drive' button at top right of main software screen.



- b) Enable drive and make test moves in Motion Simulation tab. First, click 'Servo On' button (top center). Green indicates motor is enabled. Then, test motor by commanding it to move with Jog buttons:



## Step 5

Wire to the I/O signal connector, CN2, and configure drive for use in application.

- a) If required for overall system integration, use the included mating I/O connector for soldering your own wiring. For an easier method of connecting, the BOB-4 break-out board (p/n 8500-004) may be purchased separately from Applied Motion Products.
- b) For a complete listing of pin connections on the CN2 connector, see section 4.8 of the hardware manual.
- c) Finally, return to the 'Step 1: Configuration' tab in the SVX Servo Suite software and configure the drive to set the desired Control Mode. In section 4 of this software tab, configure the inputs and outputs as needed. Input X3 may be changed from its default to "Servo On when closed", thereby requiring the X3 input connections to be wired and in a closed-circuit condition before the drive can be enabled (Servo On).

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If you have any questions or comments, please call Applied Motion Products Customer Support: (800) 525-1609, or visit us online at [applied-motion.com](http://applied-motion.com).

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