Applied Motion Products SS EtherCAT StepSERVO Motors with EtherCAT Communications User Guide

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- A 24-70 VDC power supply
- A 12-48VDC auxiliary power supply (optional, for keep-alive function)
- A compatible SS motor
- A small flat blade screwdriver for tightening the connectors (included)
- A PC running Windows XP/ Vista / Windows: 7/8/10/11 (32-bit or 64-bit) operating system
- A mini USB cable is required for configuration (included)
- Software: Step-Servo Quick Tuner, version 3.0.16.0725 or later
- A CAT5 cable for Ether CAT master or daisy chain connection (included)
- A pre-wired STO connector for CN4 connection (included)
- Motor extension cable p/n 3004-337 for NEMA11 size motor or p/n 3004-339 for NEMA17/23/24/34 motor (recommended)
- Encoder extension cable p/n 3004-336 for NEMA11 size motor or p/n 3004-338 for NEMA17/23/24/34 size motor (recommended)
- I/O cable, p/n 3004-340 (optional)

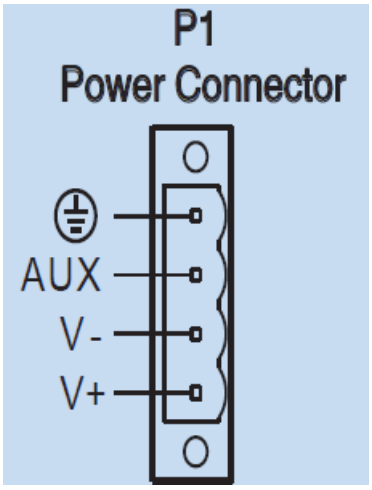
Installing the Software

- Visit **www.applied-motion.com/products/software** to download the Step-Servo Quick Tuner software.
- Install the Step-Servo Quick Tuner software on your PC.
- Connect the drive to the PC with the mini USB cable.

Connecting the Power Supply and STO

- 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.
  SS-EC main power input voltage range is 24-70 VDC.
  Note: Be careful not to reverse the "+" and "-" wires. Reversing the connection may blow the internal fuse and

void the warranty.



- Connect the auxiliary power supply (optional).

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

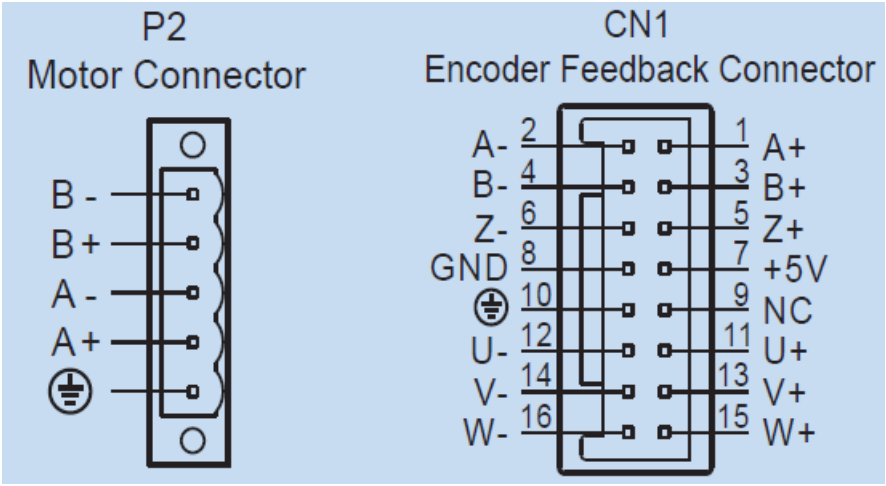
  Connect the auxiliary power supply's "-" terminal to the drive's "V-" terminal.

  SS-EC auxiliary power input voltage range is 12-48 VDC.

  NOTE: When using the optional auxiliary power supply, the main power must be applied prior to the auxiliary power.
- Ensure a proper earth ground connection to the drive's chassis.
- Connect pre-wired STO connector to CN4. See section 2.10 of Hardware Manual for details.

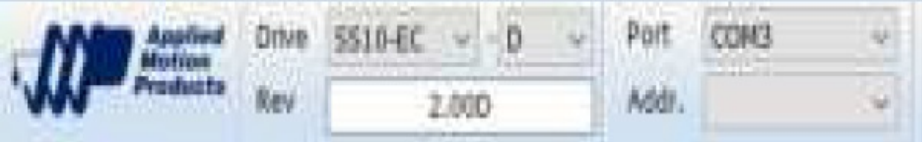
Connecting the Motor

Use the optional motor extension cable and encoder extension cable or make the extension cables using connector housings and crimps included in package. Connect the motor power wires: black, green, red and blue wires to drive's A+, A-, B+ and B- respectively. Plug the encoder feedback cable into the encoder feedback connector on the drive.



Configuring the Drive

- Run the Step-Servo Quick Tuner software and select the right COM port in the software.
- Apply power to the drive. If using the optional auxiliary power supply, the main power supply must be applied first.
- The software will recognize the drive & display the model & firmware version.



- Click “Yes” to upload the drive configuration.

- Ensure the motor model number displayed matches the actual SS motor connected to the drive.

- Configure the control mode setting, I/O function and tuning parameters, etc.
- When ready to test your configuration, click “Download All to Drive.”

Connecting the Ether CAT

- Dual RJ-45 connectors (connection CN3) accept standard Ethernet cables and are categorized as 100BASE-TX (100 Mb/sec) ports. CAT5 or CAT5e (or higher) cables should be used.
- The IN port connects to a master, or to the OUT port of an upstream node.
- The OUT port connects to a downstream node. If the drive is the last node on a network, only the IN port is used. No terminator is required on the OUT port.
- For connection with a master controller, please refer to connection guide on the Applied Motion Products website.

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**.

Documents / Resources

	Applied Motion Products SS EtherCAT StepSERVO Motors with EtherCAT Communications [pdf] User Guide SS EtherCAT StepSERVO Motors with EtherCAT Communications, SS EtherCAT, StepSERVO Motors with EtherCAT Communications, EtherCAT Communications, Communications, StepSERVO Motors, Motors

References

- Applied Motion
- Software Downloads | Applied Motion

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