



Applied Motion Products SV7-S/Q Servo Motor Driver User Guide

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Applied Motion Products SV7-S/Q Servo Motor Driver

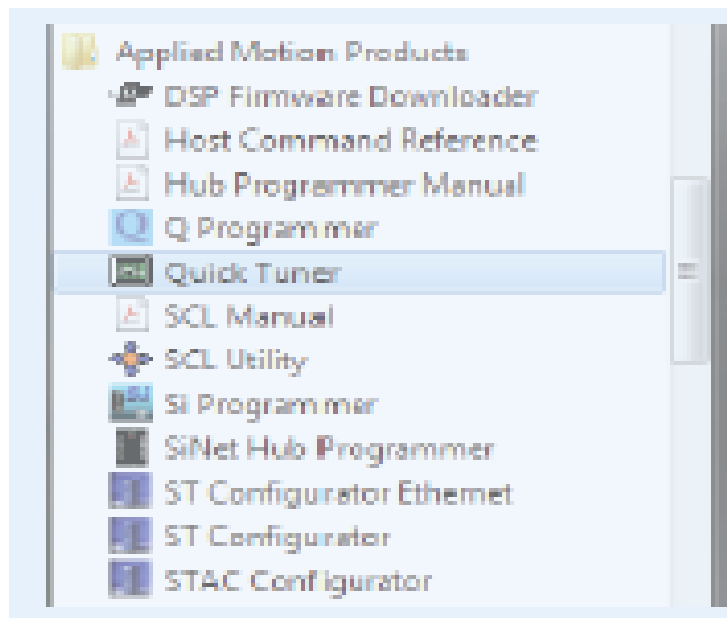


Requirements

To begin, make sure you have the following equipment:

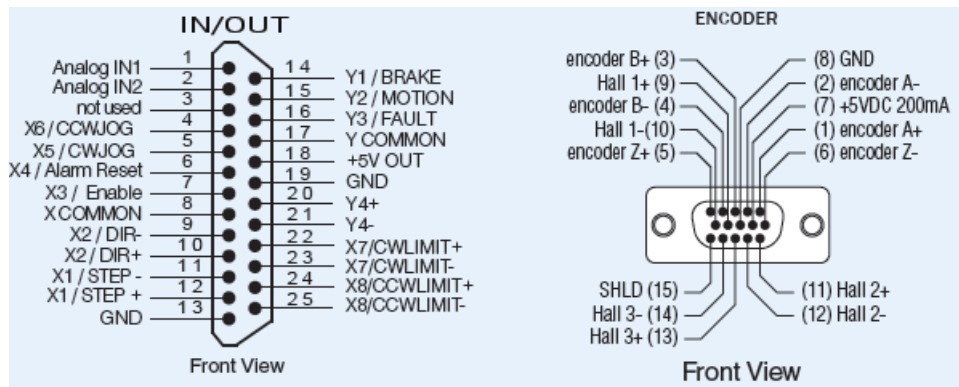
- A compatible servo motor.
- A small flat-blade screwdriver for tightening the connectors (included).
- A personal computer running Microsoft Windows 98, NT, Me, 2000, XP, Vista, or 7/8/10/11
- Quick Tuner™ software (version 2.2.18 or later) is available at www.applied-motion.com/products/software.
- For Q models, Q Programmer™ software, available at www.applied-motion.com/products/software.
- For Ethernet models, a CAT5 network cable (not included).
- For more detailed information, please download and read the SV7 Hardware Manual, available at www.applied-motion.com/support/manuals.

Step 1



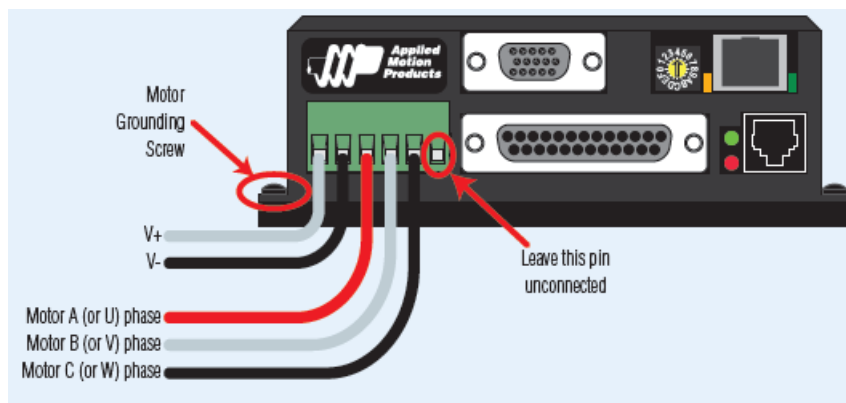
- **a)** Download and install the QuickTuner™ software.
- **b) Launch the software by clicking:** Start / Programs / Applied Motion Products / Quick Tuner
- **c)** For RS-232 drives, connect the drive to your PC using the supplied programming cable. If your PC does not have a serial port you will need a USB to-serial port (RS-232) adapter.
- **d)** For Ethernet drives, connect the drive to your network or PC using a standard CAT5 cable. Select an appropriate IP address using the rotary switch on the drive. For more information about network configurations and IP addresses, please consult the SV7 Hardware Manual.

Step 2



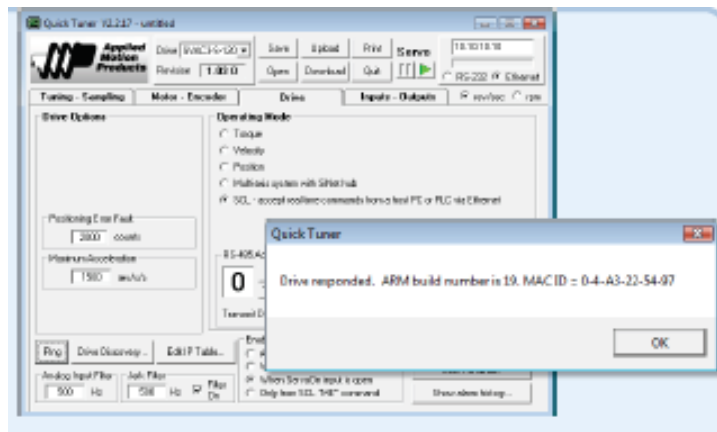
- **a)** Connect the I/O
- **b)** Connect the Encoder
- Applied Motion motor cables are available with connectors that mate directly to the encoder connector on the drive.

Step 3



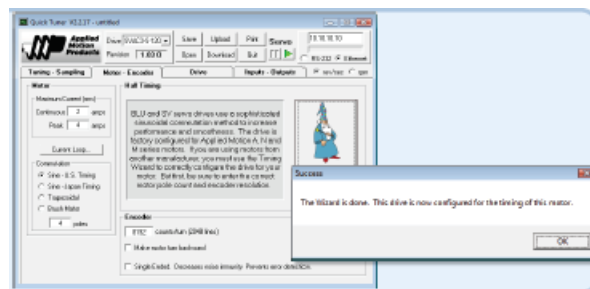
- **a)** Wire the drive to the DC power source.
- **(Do not apply power until all connections to the drive have been made.)**
- Note, the SV7 drives accept DC power from 24-80 VDC.
- **b)** Wire the servo motor to the drive.
- For a non-Applied Motion Products motor, please refer to your motor specs for wiring information.
- Be sure to connect the motor case ground to the grounding screw as indicated, leaving the last pin on the motor/power connector unconnected.

Step 4



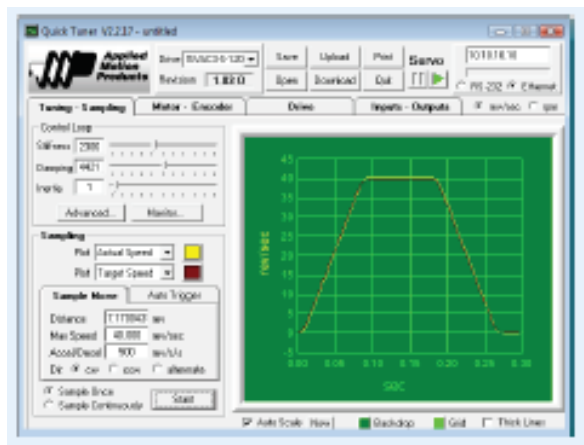
- **a)** For RS-232 drives, select the correct COM port in Quick Tuner™ and apply power to the drive. The Revision window of Quick Tuner™ will show the firmware revision of the drive once communication has been established.
- **b)** For Ethernet drives, apply power to the drive and then enter the proper IP address (refer to step 1d above). Finally, select the “Drive” tab and press the “Ping” button. You should receive a response similar to that shown here.
- **c)** If using an Applied Motion motor, click the “Open” button, navigate to the SV7 folder, and select a tuning file. Select the file that most closely matches your inertia load. The file names indicate the inertia ratio for which they were optimized. For example, the file V0200 48V 2.5X.svt was optimized for the V0200 motor at 48V and a 2.5:1 inertia ratio. When prompted, be sure to import both drive and motor parameters.

Step 5



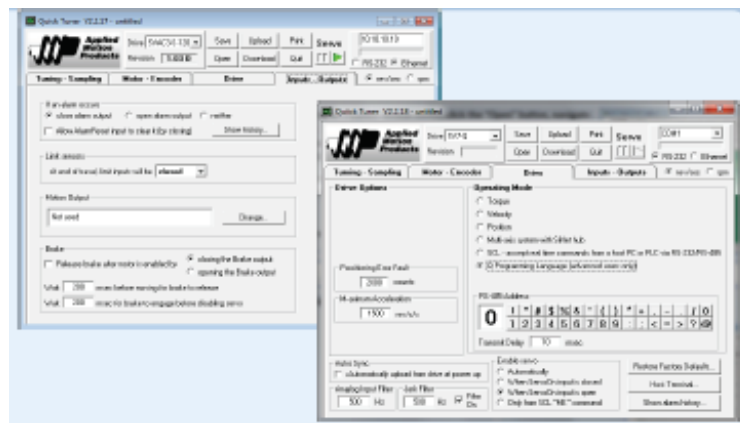
- **a)** Select the **“Motor – Encoder”** tab and confirm settings for motor maximum current and pole count, as well as the encoder resolution, are correct. If you are using a non-AMP motor, these data must be obtained from your motor’s datasheet.
- **b)** Execute the Timing Wizard, following the on-screen prompts. This will ensure that the driver can properly commute the motor.

Step 6



- a) Select the “Tuning – Sampling” tab. If using a third-party motor, or if the sample tuning setting is insufficient for any reason, the system must be tuned manually. Consult the Quick Tuner™ Software Manual for step-by-step tuning instructions.
- The Quick Tuner™ manual should be considered required reading for anyone tuning a servo system.

Step 7

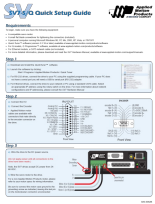


- a) Select the “Inputs – Outputs” tab, and configure any dedicated-function I/O your application may require.
- b) Select the “Drive” tab and specify an operating mode for your drive. For Q drives, you may select “Q Programming Mode”. Following step 9 (below), you will be ready to use the Q Programmer software to program motion into your drive.

Step 8

- Download your settings to the drive. Your drive is now configured for use.
- If you have any questions or comments, please call Applied Motion Products Customer Support: at (800) 525-1609, or visit us online: at applied-motion.com.
- 18645 Madrone Pkwy Morgan Hill, CA 95037 Tel: 800-525-1609 applied-motion.com 920-0062B

Documents / Resources



[Applied Motion Products SV7-S/Q Servo Motor Driver](#) [pdf] User Guide
SV7-S Q Servo Motor Driver, SV7-S, SV7-SQ, SV7-S Servo Motor Driver, SV7-SQ Servo Motor Driver, Servo Motor Driver, Servo Driver, Motor Driver, Driver

References

- [Applied Motion](#)
- [Software Downloads | Applied Motion](#)
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