STM17C Quick Setup Guide

Applied Motion Products

Requirements

To begin, make sure you have the following equipment:

- A small flat blade screwdriver for tightening the connectors (included).

- A personal computer running Microsoft Windows 98, 2000, ME, NT, XP, Vista or 7.

- *ST Configurator™* software (available at www.applied-motion.com).

- An RS-232 Applied Motion programming cable (included).

- A 5 pin spring connector (included) for connecting to the CAN network

- For more detailed information, please download and read the *STM17 Hardware Manual* available at www.applied-motion.com/support/manuals.

Step 1 - Power Supply and I/O Wiring

- Wire the drive to the DC power source.

  Do not apply power until Step 3.

  Note - the STM17 accepts DC voltages from 12-48V. If using an external fuse, we recommend: a 3AG, 2 Amp Slow Blow (Littelfuse 313002.HXP).

 See the *STM17 Hardware Manual* for more information about power supply and fuse selection.

- Connect I/O, if required by your application.

  See the *STM17 Hardware Manual* for more information about connecting I/O.
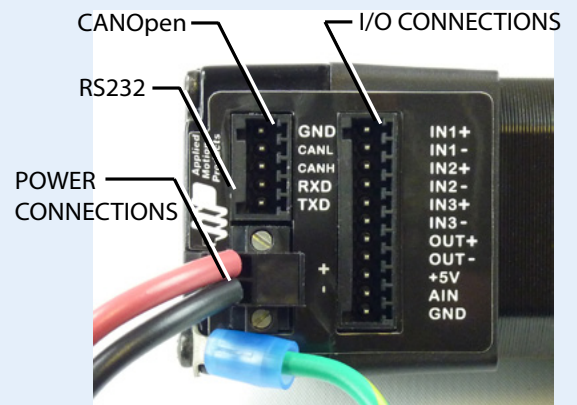
Step 2 - ST Configurator

- Connect the RS-232 programming cable.

- Download and install *ST Configurator™* software, available at www.applied-motion.com.

- Launch the software by clicking Start/Programs/Applied Motion Products/ST Configurator

- If you have any questions or comments, please call Applied Motion Products Customer Support (800)525-1609 or visit us online www.applied-motion.com.
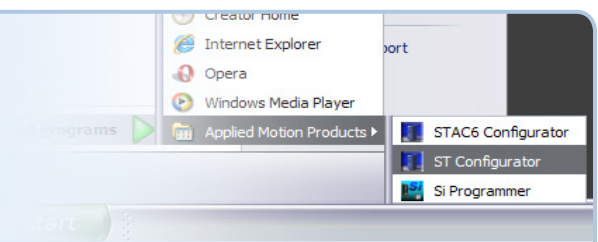
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Step 3 - Drive Configuration

a) Apply power to the drive.

b) Use *ST Configurator™* to set up the motor current, limit switches, encoder functionality (if applicable) and Node ID. (See d)

c) *ST Configurator™* includes a self test option (under the Drive menu) to verify that the STM17C and power supply are correctly wired and configured.

d) Set BitRate, Node ID

CANopen Bitrate - AMP CANopen drives have three settings, one for Bit Rate and two for Node ID. The Bit Rate is configured using a ten-position switch. See Bit Rate table for the Bit Rate settings.

The Node ID is configured using a sixteen position switch to set up the lower four bits of the Node ID. The upper three bits of the Node ID are set using *ST Configurator™*. Valid ranges for the Node ID are 0x01 through 0x7F. Node ID 0x00 is reserved in accordance to DS301 specification.

Note: The Node ID and Bit Rate are captured only after a power cycle, or after a network reset command has been sent. Changing the switches while the drive is powered on will NOT change the Node ID until one of these conditions has also been met.
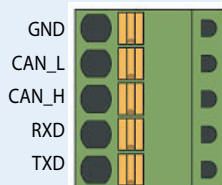
e) When configuration is complete, exit *ST Configurator™*, power off the drive and unplug the RS-232 cable.

Bit Rate Table

Switch Setting	Resultant Bit Rate
0	1 Mbps
1	800kbps
2	500 kbps
3	250 kbps
4	125 kbps
5	50 kbps
6	20 kbps
7	12.5 kbps
8	n/a
9	n/a

Node ID
Bit Rate
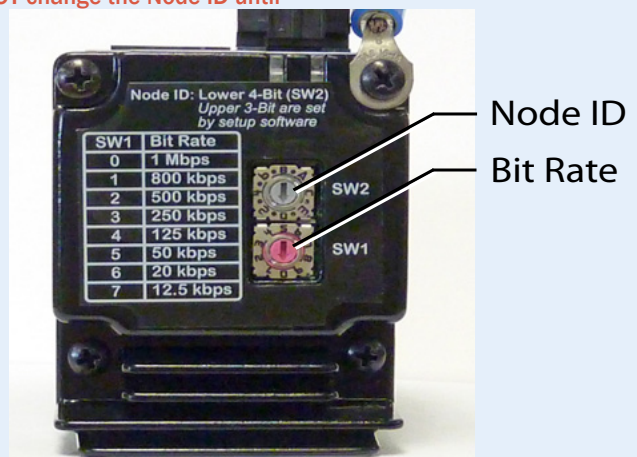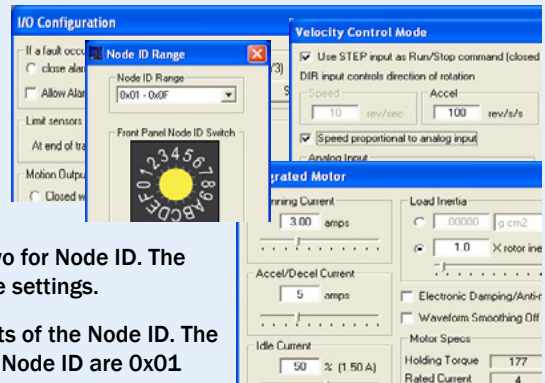
Step 4 - CANopen Bus Wiring

GND
CAN_L
CAN_H
RXD
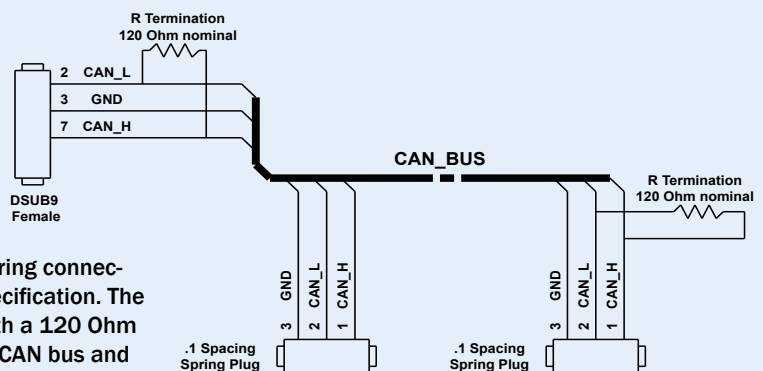TXD

5 Pin Connector

- Wire to CAN network.

The Applied Motion Products STM17 drive uses a five-pin spring connector, that conforms to the DR303 cabling and connectors specification. The connector should be wired in a daisy-chain configuration with a 120 Ohm resistor used to terminate each end. Attach the drive to the CAN bus and power-up the drive.

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