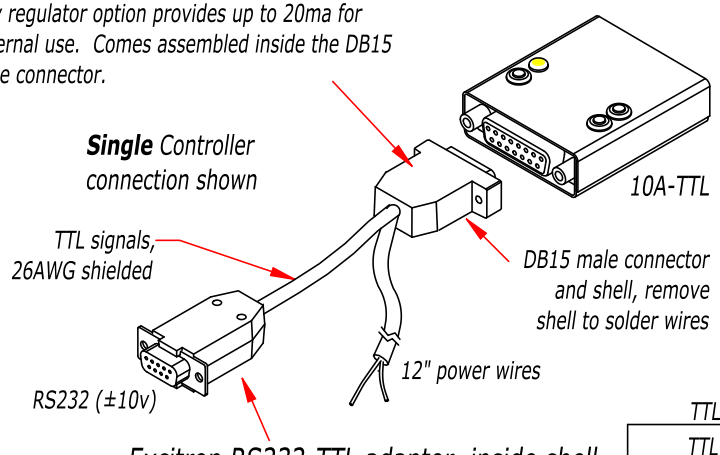
Connection details and options *for Excitron Controllers 100A-TTL, 10A-TTL-3SW, 1A-TTL, and 2A-TTL Bipolar. These controllers have a DB15 connector and TTL +5v serial communications. Other serial port interfaces such as USB and RS485 are available. See the CNC DB25 Diagram for step/dir Driver Mode.*

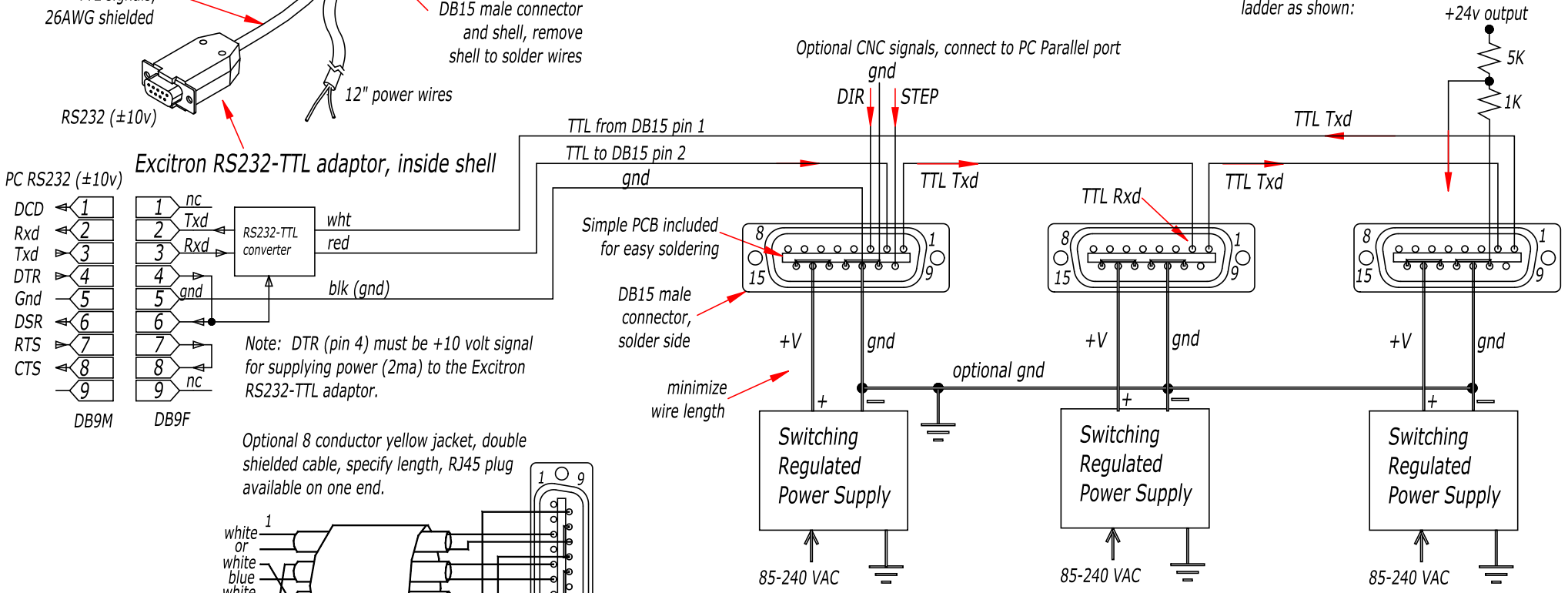
Optional Simple Serial Bus *provides a daisy chain "network" to connect multiple Controllers. The PC is the Master and each Controller must be set to a slave address. You must first set the address for each Controller* ***before*** *connecting this daisy chain. The transmit pin of eachController is tied to the Receive pin of the next Controller. See the Excitron Controller User's Manual for protocol details. In case you forget the slave address, pushing Sw1 & Sw2 manual switches (if available) will cause the slave address to be displayed. Then type '@' to stop the message.*

Note for DB15 type Controllers! all signals are TTL (+5v). Maximum allowable voltage is +5.5, minimum is -0.5. Do not connect RS232 (±10v) signals directly to TTL. For interface to RS232 PCs, use the Excitron RS232-TTL Adaptor, which translates the ±10v to +5v logic. The power ground provides the signal ground for the serial port ground. Serial communications may fail unless your PC is grounded. USB and RS232 Controllers have built-in circuitry for direct connection to the appropriate PC port.

+5v regulator option provides up to 20ma for external use. Comes assembled inside the DB15 male connector.



Option: you may connect PLC +24 volt outputs to the Controller input pins with a resistor ladder as shown:



Note: DTR (pin 4) must be +10 volt signal for supplying power (2ma) to the Excitron RS232-TTL adaptor.

Optional 8 conductor yellow jacket, double shielded cable, specify length, RJ45 plug available on one end.

Three Controllers shown in Simple Serial Bus, you may connect up to 25 units.

All controllers are supplied with matching connectors and a 12" jacketed 18 AWG or 22AWG 2 conductor power cable. White wire is +V; black/drain wire is ground. Heavy currents may require additional wires for good grounding. Always keep cables to the shortest reasonable length; this reduces electrical noise spikes and possible missed motor steps. If the power supply and/or RS232-TTL adaptor is ordered with your controller, then all wires are soldered and tested for you.

EXCITRON
info@excitron.com 303-859-9476

Controller Connections