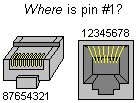
# Supracam 2LX RCU RS-485 Cabling (February 2019)

The SVA-2300 servo amplifier uses a 1394 Firewire connector. The Supracam 2LX system uses a four wire RS-422 communications to the servo amp. The servo amplifier cable (SVC-MDCOM-CBL) is a flying lead cable that is wired to a RJ45 (cable has IEEE 1394 connector on one end and bare leads on the other).

The servo amplifier cable (SVC-MDCOM-CBL) is terminated with a RJ45 connector, wired as follows:

**1394 Pin SureServo Signal Wire Color RJ45 Pin**   
1 GND Brown 8  
2 RS-232 TX Brown/White n/c  
3 RS-422/485 RX+ Red 4  
4 232 RX or 422/485 RX- Red/Black 5  
5 RS-422/485 TX+ Yellow 2  
6 RS-422/485 TX- Yellow/Black 1  
Shield not grounded Black n/c

\*RJ45 pins 3, 6, 7 are not used

The RJ45 Connection on the RCU is connected to the main computer using standard CAT-5 ethernet cables. The connection to the main computer RS-422 ports is as follows (for various options):

## Using the StarTech.com ICUSB234858I (232/422/485) eight port external unit

**DB9 Male on device**

Pin 422 485  
1 Tx- Data-  
2 Tx+ Data+  
3 Rx+   
4 Rx-  
5 GND GND

**Pan Pacific ADM-9F8 (Fry’s Electronics)  
DB9 Female to RJ45 adaptor (RS-422)**

DB9 Dev Signal SVA Signal RJ45 Wire Color   
1 Tx- Rx- 5 GRN  
2 Tx+ Rx+ 4 RED  
3 Rx+ Tx+ 2 ORG  
4 RX- Tx- 1 BLU  
5 GND GND 8 WHT

***RJ45 Not Used***

Wire Color RJ45  
BLK 3  
YEL 6  
BRN 7

## Using the Advantech PC-1612 (232/422/485) four port card

**DB9 Male on fanout cable**

Pin 422 485  
1 Tx- Data-  
2 Tx+ Data+  
3 Rx+   
4 Rx-  
5 GND GND

**Startech DB9(F) to RJ45(F) Adapter from Amazon  
or Brand Unknown (Black Adapter)  
DB9 Female to RJ45 female adaptor (RS-422)**

DB9 Dev Signal SVA Signal RJ45 Wire Color   
1 Tx- Rx- 5 GRN  
2 Tx+ Rx+ 4 RED  
3 Rx+ Tx+ 2 ORG  
4 RX- Tx- 1 BLU  
5 GND GND 8 WHT

## Using DTECH USB2.0 to RS-422/485

**DB9 Male on device**  
DB9 422  
1 Tx+  
2 Tx-  
3 Rx+  
4 Rx-  
5 GND

\*note Tx+ and Tx- are reversed from Advantech connectors

**Brand Unknown (Black Adapter)  
DB9 Female to RJ45 adaptor (RS-422)**

DB9 Dev Signal SVA Signal RJ45 Wire Color   
1 Tx+\* Rx+\* 4\* RED\*  
2 Tx-\* Rx-\* 5\* GRN\*  
3 Rx+ Tx+ 2 ORG  
4 RX- Tx- 1 BLU  
5 GND GND 8 WHT

\* - these are reversed from Advantech adaptor