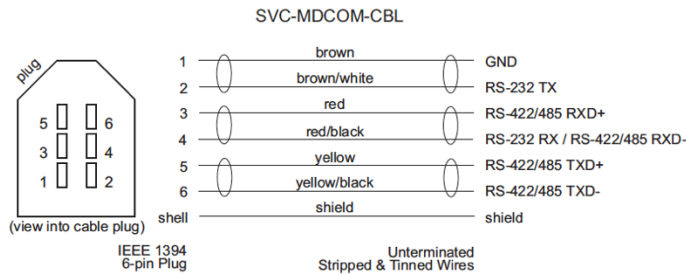


Supracam 2LX RCU RS-485 Cabling (February 2019)

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).

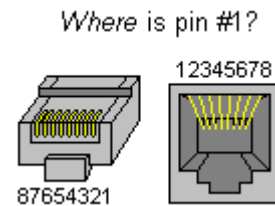
SVC-MDCOM-CBL

RS232/422/485 communication cable for use with multidrop networks; 3ft length;
IEEE 1394 plug to unterminated wires; compatible with all *SureServo* systems.



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