



Niobrara SC606 Smart Cable

The Niobrara SC606 Smart Cable is a SY/MAX[®] compatible RS-422 cable with a miniature RS-232/RS-422 converter built in to the RS-232 connector end. It is intended to be used to connect a modem or other DCE device directly to the 9-pin programmer port of a SY/MAX programmable controller or D-LOG module.

When connected to a communication port on a PLC, the cable requires no external power and generates the necessary plus and minus voltages for the RS-232 interface from the five volt supply provided by the PLC for hand-held programmers. The SC606 can also be externally powered by the included AC adapter for use with a NIM or for long cable runs (over 50 feet).

Installation:

1. Connect the 9-pin connector to an RS-422 port on the SY/MAX device.
2. Connect the DB25 end of the cable to an RS-232 modem or other DCE peripheral.
3. If the SY/MAX device is a NIM, connect the cord from the AC adapter to the 3.5 mm power jack on the back side of the RS-232 connector and plug the adapter body into a 120 VAC 50/60 Hz outlet.

The DE9 end of the cable is compatible with SY/MAX RS-422 ports. The pinout is as follows:

1	_____	RXD- (data from PLC)
2	_____	RXD+
3	_____	TXD- (data to PLC)
4	_____	TXD+
5	_____	V+ or RTS+
6	_____	CTS+
7	_____	GND or RTS-
8	_____	CTS-
9	_____	Cable shield

Pins 6 and 8 power the converter when driven to 5 volts by the hand-held programmer power output of a PLC or echo the differential true signals to pins 5 and 7 for a NIM when the cable is powered by the AC adapter.

The DB25 end of the cable is an RS-232 DTE interface. The pinout is as follows:

2	_____	TXD
3	_____	RXD
4	_____	RTS
7	_____	GND
20	_____	DTR

RTS and DTR are driven to +10 V by the SC606. The state of pins 5 (CTS), 6 (DSR), and 8 (DCD) is ignored.

WARNING!! ***NEVER*** connect the SC606 cable to the parallel printer port of a personal computer. Doing so may damage the cable and/or the parallel port.