UEL6 Ethernet Pin Description

1. CAN-Bus (X1, X2)

RJ45 Socket	Pin	Signal	Comment
8 1	1	CAN-H	
	2	CAN-L	
	3	GND	
	4	n.c.	
	5	n.c.	
	6	reserved	
	7	GND	
	8	n.c.	

This is the standard CIA pinning. Both connectors are wired in parallel, so it's easy to connect many crates in a daisy-chain.

2. RS232 (X3)

RJ45 Socket	Pin	Signal	Comment
8 1	1	n.c.	
	2	n.c.	
	3	n.c.	
	4	GND	
	5	RXD	Output
	6	TXD	Input
	7	CTS	Output
	8	RTS	Input

This is the standard RS232D DCE pinning. Connection to DTE (e.g. computer) with a 1:1-cable.

3. Ethernet (X4)

RJ45 Socket	Pin	Signal	Comment
8 1	1	TX+	
	2	TX-	
	3	RX+	
	4	GND 1	75 Ohm
	5	GND 1	
	6	RX-	
	7	GND 2	75 Ohm
	8	GND 2	

This is the standard NIC configuration. You need a 1:1-cable to connect a to a HUB, or a cross-over cable to connect to another NIC (e.g. a computer)

4. Serial Patch Cable from X3 (RS232D DCE) to a Computer (TIA457 DTE)

RJ45 Plug				DSUB9 Male Plug		
	Pin	Wire Color (EIA568A)	Wire Color (EIA568B)	Signal	Pin	
	1	orange/white	green/white	n.c.	9	F 1
	2	orange	green	n.c.	1	
	3	green/white	orange/white	n.c.	4	$\setminus 00000/$
	4	blue	blue	GND	5	$\setminus \circ \circ \circ \circ /$
	5	blue/white	blue/white	RXD	2	
18	6	green	orange	TXD	3	5 0
	7	brown/white	brown/white	CTS	8	
	8	brown	brown	RTS	7	

This cable is used to connect the X3 connector to an CPU/PC with DSUB9 connector according to TIA457 DTE (The DSUB9pinning for the PC's, defined by IBM). The firmware-update of the UEL6000 does only require the GND, TXD and RXD lines, RTS/CTS are not used.

An easy way of producing such a cable is the use of a standard ethernet patch cable, which wires are colored according to EIA568A or B, cut it in the middle, and connect a DSBU9 male connector.