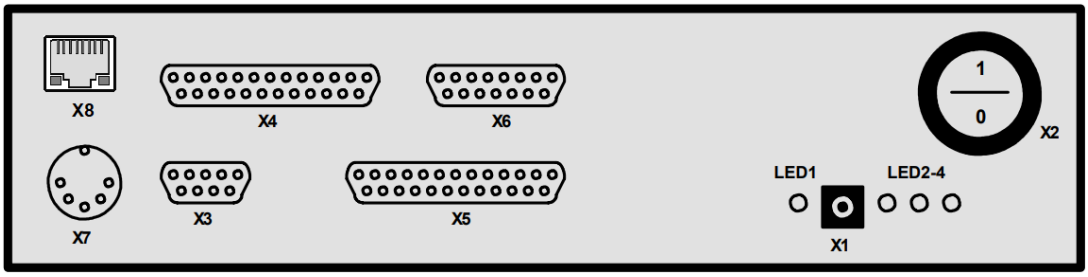
The CNCCON S axes controller in the standard housing and EA160802 extension card has the following pin assignment:



X1: Power Supply 15-24VDC with included Plug-In power supply (30W) (Socket connector 5.5/2.1mm inside 24VDC, outside GND)
X2: On/Off Switch
X3: RS-232 connector (9-poles D-SUB male), connection with included serial cable (communication with ***WinPC-NC*** or host program)
X7: Keypad connector (DIN 5-poles), **optional**
X8: Ethernet Connector, **optional**
LED1: 24VDC Power supply available
LED2-4: internal voltage 5V, 12V and 24V available

X4 Machine connection, 25 pole D-SUB female

Direction- and clock signals for up to 4 axes

Pin	Signal	Pin	Signal
Pin 2	Direction X	Pin 6	Direction Z
Pin 3	Clock/Pulse X	Pin 7	Clock/Pulse Z
Pin 4	Direction Y	Pin 8	Direction 4
Pin 5	Clock/Pulse Y	Pin 9	Clock/Pulse 4

Input signals

Pin	Input	Portadress	Bit mask	Invert	Example for signal
Pin 10	DI16	379hex	6	0	freely definable
Pin 11	DI17	379hex	7	1	freely definable
Pin 12	DI18	379hex	5	0	freely definable
Pin 13	DI19	379hex	4	0	freely definable
Pin 15	DI20	379hex	3	0	freely definable

Output signals

Pin	Input	Portadress	Bit mask	Invert	Example for signal
Pin 1	DO08	37Ahex	0	1	freely definable
Pin 14	DO09	37Ahex	1	1	freely definable
Pin 16	DO10	37Ahex	2	0	freely definable
Pin 17	DO11	37Ahex	3	1	freely definable

Pin 18-25 GND **All signals 5V TTL,**
24V output signals, differential output signals and A/B encoder signals are available optional

X5 Digital inputs for PNP sensors, optically isolated, 12-30VDC, 25 pole D-SUB female

Input signals (with internal Pull-Down Resistor, Connect high level to detect as active)

Pin	Input	Portadress	Bitmask	Invert	Example for signal
Pin 14	DI00	300hex	0	0	Limit X-, Reference X
Pin 15	DI01	300hex	1	0	Limit Y-, Reference Y
Pin 16	DI02	300hex	2	0	Limit Z-, Reference Z
Pin 17	DI03	300hex	3	0	Limit 4-, Reference 4
Pin 18	DI04	300hex	4	0	Limit X+
Pin 19	DI05	300hex	5	0	Limit Y+
Pin 20	DI06	300hex	6	0	Limit Z+
Pin 21	DI07	300hex	7	0	Limit 4+
Pin 22	DI08	301hex	0	0	external Start
Pin 23	DI09	301hex	1	0	Spindle Speed OK
Pin 24	DI10	301hex	2	0	Tool Length sensor
Pin 25	DI11	301hex	3	0	Housing
Pin 13	DI12	301hex	4	0	Machine ready
Pin 1	DI13	301hex	5	0	freely definable
Pin 2	DI14	301hex	6	0	freely definable
Pin 3	DI15	301hex	7	0	freely definable

Pin 5-12 0V/GND Input for GND of external optocoupler power supply, 12V-30VDC

X6 Digital/Analog outputs, optically isolated, 12-30VDC, 15 pole D-SUB female

Output signals

Pin	Output	Portadress	Bitmask	Invert	Example for signal
Pin 9	DO00	305hex	0	0	Spindle On/Off
Pin 10	DO01	305hex	1	0	Cooling On/Off
Pin 11	DO02	305hex	2	0	Dispensing On/Off
Pin 12	DO03	305hex	3	0	Job active
Pin 13	DO04	305hex	4	0	Collet chuck
Pin 14	DO05	305hex	5	0	Ready
Pin 15	DO06	305hex	6	0	Additional output Q100
Pin 8	DO07	305hex	7	0	Additional output Q101

Analog outputs 0-10V

Pin 1	0V, GND	-	-	-	GND for Analogoutput
Pin 2	AO0	302hex	-	-	0-10V, Spindle Speed
Pin 3	AO1	303hex	-	-	freely definable

Pin 4-6 12-30VDC External power supply for Output DO00-DO07
Pin 7 0V/GND Input for GND of external optocoupler power supply, 12V-30VDC

The optically isolated outputs DO00 – DO07 need a external power supply 12-30VDC connected to X6 Pin 4-6 and X5 Pin 5-12

All outputs DO00-DO07 max. 30VDC, 750mA