1215 External Connectors, 6890N

Overview

This section show the pinouts for the external connectors on the back of the Agilent 6890N instrument. See section External Connectors, 6890A and 6890 Plus for the 6890A and 6890 Plus instruments.

These connectors are used for communications with external instruments.

Back of 6890N GC



lumber	Description	Connector
1	Sampler 1 – Communications and power for the front injection tower	P4
2	Sampler 2 – Communications and power for the back injection tower	P5
3	Tray – Communications and power for the sample tray	P6
4	Signal 1 – Analog output for integrators or A/D converters	J1
5	Signal 2 – Analog output for integrators or A/D converters	J2
6	LAN – Local Area Network	
7	RS-232 – For modem or non-Agilent controller	JP1
8	Remote – Start/stop signals for use with integrators, Mass Sensitive detec- tors, and other sampling devices (e.g. headspace)	JP1
9	Event – Contact closures and 24V out- puts for valve control	J4
10	BCD input for stream selection valve	J5



Samplers and Tray



Figure 1215-2 Sampler and tray connections

B8

VAC2

Signal 1/Signal 2 analog out





J1, J2 Analog out				
Pin	Function			
1	1 mV COM			
2	1 V & 10 V COM			
3	1 mV			
4	1 V			
5	Chassis GND			
6	10 V			



Local Area Network (LAN)



Figure 1215-4 LAN connection

RS-232





JP1, RS-232				
Pin	Function			
1	DCD			
2	RxD			
3	TxD			
4	DTR			
5	GND			
6	DSR			
7	RTS			
8	CTS			
9	unused			

RS-232 Loop back wiring

1

2

3

4 5

6

7

8 9

RS-232 Standard wiring



Figure 1215-5 RS-232 connection

Signal descriptions

Data Carrier Detect—is connected to a general purpose input on the SC26C92. Currently, there are no plans to use this signal.

Receive Data

Transmit Data

Data Terminal Ready—will be set ON when the 6890 GC is ready for communications (self-test complete).

Digital Ground—is tied to the digital signal ground on the mainboard.

Data Set Ready—is connected to the SC26C92. Not currently used.

Request to Send—is set ON when the 6890 GC to the host when HARDWARE flow control set. If flow control is configured for XON/XOFF or NONE, RTS will stay ON. If HARDWARE handshake is configured, RTS is used to inform the host that the 6890 GC is ready to communicate and there is room in the data buffer for data. RTS will follow the same logic as XON/XOFF for pacing data.

Clear to Send—is used for pacing data from the 6890 GC to the host when HARDWARE flow control is set. When CTS is sensed in the OFF state, transmission will be suspended. If flow control is set to XON/XOFF or NONE, DSR will be ignored.

Clear to Send—Not currently used.

Remote start/stop



Figure 1215-6 Remote start/stop connection

Signal descriptions

Prepare (low)—Request to prepare for analysis. Receiver is any module performing pre-analysis activities.

Start (low)—Request to start run/timetable. Receiver is any module performing runtime-controlled activities.

Ready (high)—System is ready for next analysis. Receiver is any sequence controller.

Stop (low)—Request to reach system ready state as soon as possible (for example, stop run, abort or finish, and stop injection). Receiver is any module performing runtime-controlled activities.

Remote control

Remote control allows easy connection between single instruments or systems to ensure coordinated analysis with simple coupling requirements.

Start Relay-A 120 millisecond contact closure



Figure 1215-7 Remote control analysis

Control of analysis is maintained by signal readiness READY for next analysis, followed by START of run and optional STOP of run triggered on the respective lines. In addition, PREPARE and START REQUEST may be issued.

The signal levels are defined as standard TTL levels (0 V is logic true, +5 V is logic false).

Input Load >= 2.2 kOhm against +5 V

Output type is open collector.

External event



J4 External event						
Pin	Function	Max. rating	Valve			
1	24 V Out 1	75 mA output	5			
2	24 V Out 2	75 mA output	6			
3	GND					
4	GND					
5	Contact 1	48V ac/dc, 250 mA	7			
6	Contact 1		7			
7	Contact 2	48V ac/dc, 250 mA	8			
8	Contact 2		8			
9	Chassis					
	GND					

Note: The 24V OUT1 and 24V OUT2 signals are shown on the same circuitry diagram below, however they each have their own distinct circuits. The CONTACT1 and CONTACT2 signals are presented in the same manner. Bold designators refer to the bold signal to the right.



Figure 1215-8 External event connection

BCD inputs



Figure 1215-9 BCD input connection