

DT9820 Series Pin Assignments

Table 1 lists the pin assignments of connector J1 on the DT9820 Series function modules.

Table 1: Pin Assignments for Connector J1 on the DT9820 Series Function Modules

Pin Number	Signal Description	Pin Number	Signal Description
1	Isolated Digital Ground	2	Digital Output Line 3
3	Digital Output Line 2	4	Digital Output Line 1
5	Digital Output Line 0	6	Digital Input Line 3
7	Digital Input Line 2	8	Digital Input Line 1
9	Digital Input Line 0	10	+5 V Isolated Input/Output ^a
11	Isolated Digital Ground	12	Isolated Analog Common
13	Analog Input Subsystem 03	14	Isolated Analog Common
15	Analog Input Subsystem 02	16	2.5 V Reference
17	Analog Input Subsystem 01	18	Isolated Analog Common
19	Analog Input Subsystem 00	20	Digital Output Line 7
21	Digital Output Line 6	22	Digital Output Line 5
23	Digital Output Line 4	24	Digital Input Line 7
25	Digital Input Line 6	26	Digital Input Line 5
27	Digital Input Line 4	28	Analog Output 0
29	Isolated Analog Common	30	Isolated Analog Common
31	Analog Input Subsystem 03 Return	32	Isolated Analog Common
33	Analog Input Subsystem 02 Return	34	Analog Output 1
35	Analog Input Subsystem 01 Return	36	Isolated Analog Common
37	Analog Input Subsystem 00 Return		

- a. +5 V output is available only when one of the subsystems is activated, which, in turn, activates power to the module. You can externally power the +5 V isolated output signal. This allows you to retain the last value that was written to the digital output lines when the DT9820 Series module is in low-power mode.

STP9820 Screw Terminal Panel Pin Assignments

Table 2 lists the pin assignments of connector J1 on the STP9820 screw terminal panel.

Table 2: Pin Assignments for Connector J1 on the STP9820 Screw Terminal Panel

Pin Number	Signal Description	Pin Number	Signal Description
1	Isolated Digital Ground	2	Digital Output Line 3
3	Digital Output Line 2	4	Digital Output Line 1
5	Digital Output Line 0	6	Digital Input Line 3
7	Digital Input Line 2	8	Digital Input Line 1
9	Digital Input Line 0	10	+5 V Isolated Input/Output ^a
11	Isolated Digital Ground	12	Isolated Analog Common
13	Analog Input Subsystem 03	14	Isolated Analog Common
15	Analog Input Subsystem 02	16	2.5 V Reference
17	Analog Input Subsystem 01	18	Isolated Analog Common
19	Analog Input Subsystem 00	20	Digital Output Line 7
21	Digital Output Line 6	22	Digital Output Line 5
23	Digital Output Line 4	24	Digital Input Line 7
25	Digital Input Line 6	26	Digital Input Line 5
27	Digital Input Line 4	28	Analog Output 0
29	Isolated Analog Common	30	Isolated Analog Common
31	Analog Input Subsystem 03 Return	32	Isolated Analog Common
33	Analog Input Subsystem 02 Return	34	Analog Output 1
35	Analog Input Subsystem 01 Return	36	Isolated Analog Common
37	Analog Input Subsystem 00 Return		

- a. +5 V output is available only when one of the subsystems is activated, which, in turn, activates power to the module. You can externally power the +5 V isolated output signal. This allows you to retain the last value that was written to the digital output lines when the DT9820 Series module is in low-power mode.

Table 3 lists the screw terminal assignments of the STP9820 screw terminal panel.

Table 3: Screw Terminal Assignments of the STP9820 Screw Terminal Panel

Screw Terminal Block	Terminal Number	Terminal Label	Signal Description
TB1	1	CH0H	Analog Input Subsystem 0 High
	2	CH0L	Analog Input Subsystem 0 Low
	3	AGND	Analog Ground
	4	CH1H	Analog Input Subsystem 1 High
	5	CH1L	Analog Input Subsystem 1 Low
	6	AGND	Analog Ground
TB2	1	CH2H	Analog Input Subsystem 2 High
	2	CH2L	Analog Input Subsystem 2 Low
	3	AGND	Analog Ground
	4	CH3H	Analog Input Subsystem 3 High
	5	CH3L	Analog Input Subsystem 3 Low
	6	AGND	Analog Ground
TB3	1	VREF	2.5 V Reference
	2	AGND	Analog Ground
	3	DAC0	Analog Output 0
	4	DAC1	Analog Output 1
	5	DGND	Digital Ground
	6	5VD	+5 V ^a
TB4	1	DOUT0	Digital Output 0
	2	DOUT1	Digital Output 1
	3	DOUT2	Digital Output 2
	4	DOUT3	Digital Output 3
	5	DOUT4	Digital Output 4
	6	DOUT5	Digital Output 5
	7	DOUT6	Digital Output 6
	8	DOUT7	Digital Output 7
	9	DGND	Digital Ground

Table 3: Screw Terminal Assignments of the STP9820 Screw Terminal Panel (cont.)

Screw Terminal Block	Terminal Number	Terminal Label	Signal Description
TB5	1	DIN0	Digital Input 0
	2	DIN1	Digital Input 1
	3	DIN2	Digital Input 2
	4	DIN3	Digital Input 3
	5	DIN4	Digital Input 4
	6	DIN5	Digital Input 5
	7	DIN6	Digital Input 6
	8	DIN7	Digital Input 7
	9	DGND	Digital Ground

- a. +5 V output is available only when one of the subsystems is activated, which, in turn, activates power to the module. You can externally power the +5 V isolated output signal. This will allow you to retain the last value that was written to the digital output lines when the DT9820 Series module is in low-power mode.