

I/O Assembly and Reference Data

See the tables for I/O assembly and reference data.

1791DS-IB12, 1791DS-IB8X0B8, 1791DS-IB4X0W4 Data

The bits in the tag definitions of the Logix Designer application and RSNetWorx for DeviceNet software are different than those shown in this section. This table defines the name associations for clarification with the programming software.

Bit Definitions	Logix Designer Application Tag Name
Safety Input 0	Pt00Data
Safety Input 11	Pt11Data
Safety Input 0 Status	Pt00InputStatus
Safety Input 11 Status	Pt11InputStatus
Safety In Status	InputStatus
Muting Lamp Status	MutingStatus
Safety Output 0	Pt00Data
Safety Output 7	Pt07Data
Standard Output 0	Test00Data
Standard Output 3	Test03Data
Safety Output 0 Status	Pt00OutputStatus
Safety Output 7 Status	Pt07OutputStatus
Safety Out Status	OutputStatus
Safety Output 0 Monitor	Pt00Monitor
Safety Output 7 Monitor	Pt07Readback
Test Output 0 Status	Pt00TestOutputStatus
Test Output 3 Status	Pt03TestOutputStatus

These tables provide reference data concerning input and output data.

Table 18 - Input Data for 1791DS-IB12, 1791DS-IB8XOB8, 1791DS-IB4XOW4 Modules

Instance Hex (decimal)	Module	Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
203 (515)	1791DS-IB4XOW4	0	Reserved				Safety Input 3	Safety Input 2	Safety Input 1	Safety Input 0
204 (516)	1791DS-IB8XOB8	0	Safety Input 7	Safety Input 6	Safety Input 5	Safety Input 4	Safety Input 3	Safety Input 2	Safety Input 1	Safety Input 0
20C (524)	1791DS-IB12	0	Safety Input 7	Safety Input 6	Safety Input 5	Safety Input 4	Safety Input 3	Safety Input 2	Safety Input 1	Safety Input 0
		1	Reserved				Safety Input 11	Safety Input 10	Safety Input 9	Safety Input 8
224 (548)	1791DS-IB12	0	Safety Input 7	Safety Input 6	Safety Input 5	Safety Input 4	Safety Input 3	Safety Input 2	Safety Input 1	Safety Input 0
		1	Safety Input 7 Status	Safety Input 6 Status	Safety Input 5 Status	Safety Input 4 Status	Safety Input 3 Status	Safety Input 2 Status	Safety Input 1 Status	Safety Input 0 Status
22C (556)	1791DS-IB12	0	Safety Input 7	Safety Input 6	Safety Input 5	Safety Input 4	Safety Input 3	Safety Input 2	Safety Input 1	Safety Input 0
		1	Safety Input 3 Status	Safety Input 2 Status	Safety Input 1 Status	Safety Input 0 Status	Safety Input 11	Safety Input 10	Safety Input 9	Safety Input 8
		2	Safety Input 11 Status	Safety Input 10 Status	Safety Input 9 Status	Safety Input 8 Status	Safety Input 7 Status	Safety Input 6 Status	Safety Input 5 Status	Safety Input 4 Status
300 (768)	1791DS-IB12, 1791DS-IB8XOB8, 1791DS-IB4XOW4	0	Reserved						Output Power Error	Input Power Error
310 (784)	1791DS-IB12	0	Safety Input 7	Safety Input 6	Safety Input 5	Safety Input 4	Safety Input 3	Safety Input 2	Safety Input 1	Safety Input 0
		1	Muting Lamp Status	Combined Safety In Status	Reserved			Safety Input 11	Safety Input 10	Safety Input 9
311 (785)	1791DS-IB12	0	Safety Input 7	Safety Input 6	Safety Input 5	Safety Input 4	Safety Input 3	Safety Input 2	Safety Input 1	Safety Input 0
		1	Safety Input 3 Status	Safety Input 2 Status	Safety Input 1 Status	Safety Input 0 Status	Safety Input 11	Safety Input 10	Safety Input 9	Safety Input 8
		2	Safety Input 11 Status	Safety Input 10 Status	Safety Input 9 Status	Safety Input 8 Status	Safety Input 7 Status	Safety Input 6 Status	Safety Input 5 Status	Safety Input 4 Status
		3	Muting Lamp Status	Reserved						
312 (786)	1791DS-IB12	0	Safety Input 7	Safety Input 6	Safety Input 5	Safety Input 4	Safety Input 3	Safety Input 2	Safety Input 1	Safety Input 0
		1	Safety Input 3 Status	Safety Input 2 Status	Safety Input 1 Status	Safety Input 0 Status	Safety Input 11	Safety Input 10	Safety Input 9	Safety Input 8
		2	Safety Input 11 Status	Safety Input 10 Status	Safety Input 9 Status	Safety Input 8 Status	Safety Input 7 Status	Safety Input 6 Status	Safety Input 5 Status	Safety Input 4 Status
		3	Muting Lamp Status	Reserved				Test Output 3 Status	Test Output 2 Status	Test Output 1 Status
320 (800)	1791DS-IB8XOB8	0	Safety Input 7	Safety Input 6	Safety Input 5	Safety Input 4	Safety Input 3	Safety Input 2	Safety Input 1	Safety Input 0
		1	Muting Lamp Status	Combined Safety In Status	Combined Safety Out Status	Reserved				

Table 18 - Input Data for 1791DS-IB12, 1791DS-IB8XOB8, 1791DS-IB4XOW4 Modules (continued)

Instance Hex (decimal)	Module	Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
321 (801)	1791DS-IB8XOB8	0	Safety Input 7	Safety Input 6	Safety Input 5	Safety Input 4	Safety Input 3	Safety Input 2	Safety Input 1	Safety Input 0
		1	Safety Input 7 Status	Safety Input 6 Status	Safety Input 5 Status	Safety Input 4 Status	Safety Input 3 Status	Safety Input 2 Status	Safety Input 1 Status	Safety Input 0 Status
		2	Safety Output 7 Status	Safety Output 6 Status	Safety Output 5 Status	Safety Output 4 Status	Safety Output 3 Status	Safety Output 2 Status	Safety Output 1 Status	Safety Output 0 Status
		3	Muting Lamp Status	Reserved						
322 (802)	1791DS-IB8XOB8	0	Safety Input 7	Safety Input 6	Safety Input 5	Safety Input 4	Safety Input 3	Safety Input 2	Safety Input 1	Safety Input 0
		1	Safety Input 7 Status	Safety Input 6 Status	Safety Input 5 Status	Safety Input 4 Status	Safety Input 3 Status	Safety Input 2 Status	Safety Input 1 Status	Safety Input 0 Status
		2	Safety Output 7 Status	Safety Output 6 Status	Safety Output 5 Status	Safety Output 4 Status	Safety Output 3 Status	Safety Output 2 Status	Safety Output 1 Status	Safety Output 0 Status
		3	Safety Output 7 Readback	Safety Output 6 Readback	Safety Output 5 Readback	Safety Output 4 Readback	Safety Output 3 Readback	Safety Output 2 Readback	Safety Output 1 Readback	Safety Output 0 Readback
		4	Muting Lamp Status	Reserved						
323 (803)	1791DS-IB8XOB8	0	Safety Input 7	Safety Input 6	Safety Input 5	Safety Input 4	Safety Input 3	Safety Input 2	Safety Input 1	Safety Input 0
		1	Safety Input 7 Status	Safety Input 6 Status	Safety Input 5 Status	Safety Input 4 Status	Safety Input 3 Status	Safety Input 2 Status	Safety Input 1 Status	Safety Input 0 Status
		2	Safety Output 7 Status	Safety Output 6 Status	Safety Output 5 Status	Safety Output 4 Status	Safety Output 3 Status	Safety Output 2 Status	Safety Output 1 Status	Safety Output 0 Status
		3	Safety Output 7 Readback	Safety Output 6 Readback	Safety Output 5 Readback	Safety Output 4 Readback	Safety Output 3 Readback	Safety Output 2 Readback	Safety Output 1 Readback	Safety Output 0 Readback
		4	Muting Lamp Status	Reserved				Test Output 3 Status	Test Output 2 Status	Test Output 1 Status
330 (816)	1791DS-IB4XOW4	0	Muting Lamp Status	Combined Safety In Status	Combined Safety Out Status	Reserved	Safety Input 3	Safety Input 2	Safety Input 1	Safety Input 0
331 (817)	1791DS-IB4XOW4	0	Safety Input 3 Status	Safety Input 2 Status	Safety Input 1 Status	Safety Input 0 Status	Safety Input 3	Safety Input 2	Safety Input 1	Safety Input 0
		1	Muting Lamp Status	Reserved				Safety Output 3 Status	Safety Output 2 Status	Safety Output 1 Status
332 (818)	1791DS-IB4XOW4	0	Safety Input 3 Status	Safety Input 2 Status	Safety Input 1 Status	Safety Input 0 Status	Safety Input 3	Safety Input 2	Safety Input 1	Safety Input 0
		1	Safety Output 3 Readback	Safety Output 2 Readback	Safety Output 1 Readback	Safety Output 0 Readback	Safety Output 3 Status	Safety Output 2 Status	Safety Output 1 Status	Safety Output 0 Status
		2	Muting Lamp Status	Reserved						
333 (819)	1791DS-IB4XOW4	0	Safety Input 3 Status	Safety Input 2 Status	Safety Input 1 Status	Safety Input 0 Status	Safety Input 3	Safety Input 2	Safety Input 1	Safety Input 0
		1	Safety Output 3 Readback	Safety Output 2 Readback	Safety Output 1 Readback	Safety Output 0 Readback	Safety Output 3 Status	Safety Output 2 Status	Safety Output 1 Status	Safety Output 0 Status
		2	Muting Lamp Status	Reserved				Test Output 3 Status	Test Output 2 Status	Test Output 1 Status

Table 18 - Input Data for 1791DS-IB12, 1791DS-IB8XOB8, 1791DS-IB4XOW4 Modules (continued)

Instance Hex (decimal)	Module	Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
340 (832)	1791DS-IB12	0	Reserved							
		1	Reserved				Test Output 3 Status	Test Output 2 Status	Output Power Error	Input Power Error
341 (833)	1791DS-IB8XOB8	0	Reserved							
		1	Safety Output 7 Readback	Safety Output 6 Readback	Safety Output 5 Readback	Safety Output 4 Readback	Safety Output 3 Readback	Safety Output 2 Readback	Output Power Error	Input Power Error
		2	Reserved				Test Output 3 Status	Test Output 2 Status	Test Output 1 Status	Test Output 0 Status
342 (834)	1791DS-IB4XOW4	0	Reserved							
		1	Test Output 3 Status	Test Output 2 Status	Test Output 1 Status	Test Output 0 Status	Safety Output 3 Readback	Safety Output 2 Readback	Safety Output 1 Readback	Safety Output 0 Readback

Table 19 - Output Data for 1791DS-IB12, 1791DS-IB8XOB8, 1791DS-IB4XOW4 Modules

Instance Hex (decimal)	Module	Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
21 (33)	1791DS-IB12, 1791DS-IB8XOB8, 1791DS-IB4XOW4	0	Reserved				Standard Output 3	Standard Output 2	Standard Output 1	Standard Output 0
233 (563)	1791DS-IB4XOW4	0	Reserved				Safety Output 3	Safety Output 2	Safety Output 1	Safety Output 0
234 (564)	1791DS-IB8XOB8	0	Safety Output 7	Safety Output 6	Safety Output 5	Safety Output 4	Safety Output 3	Safety Output 2	Safety Output 1	Safety Output 0
350 (848)	1791DS-IB4XOW4	0	Standard Output 3	Standard Output 2	Standard Output 1	Standard Output 0	Safety Output 3	Safety Output 2	Safety Output 1	Safety Output 0
351 (849)	1791DS-IB8XOB8	0	Safety Output 7	Safety Output 6	Safety Output 5	Safety Output 4	Safety Output 3	Safety Output 2	Safety Output 1	Safety Output 0
		1	Reserved				Standard Output 3	Standard Output 2	Standard Output 1	Standard Output 0