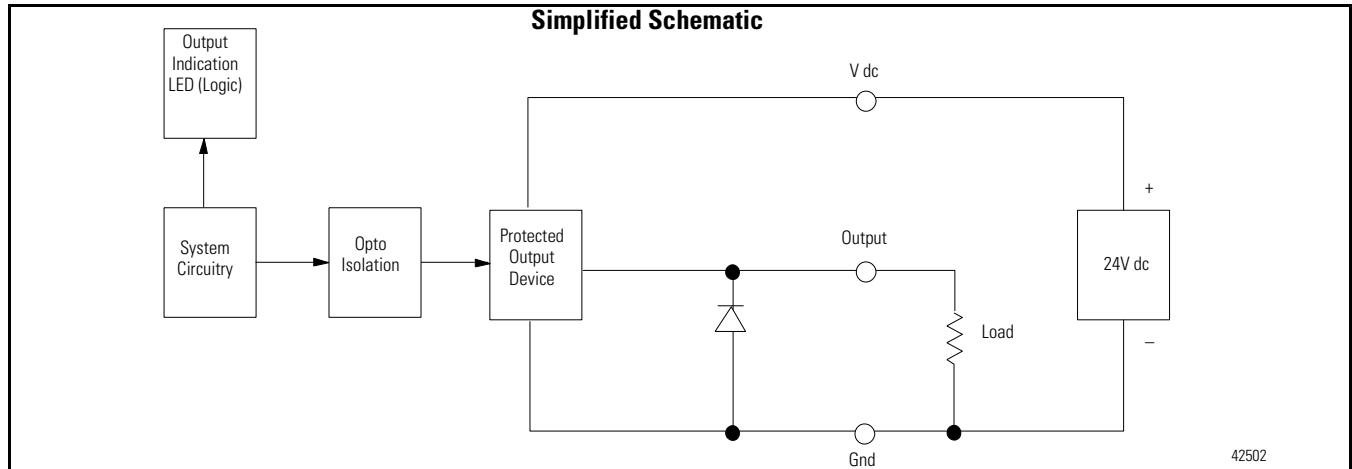


8 Sourcing Output Base Module 1791D-0B8P



The CompactBlock base module I/O is exchanged with the master through a poll, change-of-state, or cyclic connection.

The module consumes 1 byte for every 8 outputs. When an expansion module is connected, it returns an additional byte indicating the health of the expansion module. For the Output bits, when the bit is set (1), the output will be turned on.

1791D-0B8P module assemblies are below.

**1791D-0B8P with a 1791-16B0X or 1791-16V0X expansion
(Default Assembly)**

	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
Byte 0	In 7	In 6	In 5	In 4	In 3	In 2	In 1	In 0
Byte 1	In 15	In 14	In 13	In 12	In 11	In 10	In 9	In 8
Byte 2	Exp Fault							

Exp Fault = Expansion Fault

**1791D-0B8P with a 1791-0B16PX or 1791-0V16PX expansion
(Default Assembly)**

	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
Byte 0	Exp Fault							

Exp Fault = Expansion Fault

**1791D-0B8P with a 1791-16B0X or 1791-16V0X expansion
(Input Only Assembly)**

	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
Byte 0	In 7	In 6	In 5	In 4	In 3	In 2	In 1	In 0
Byte 1	In 15	In 14	In 13	In 12	In 11	In 10	In 9	In 8

1791D-0B8P (DeviceLogix Assembly)

	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
Byte 0			Logic Ena					
Byte 1	Out 7	Out 6	Out 5	Out 4	Out 3	Out 2	Out 1	Out 0
Byte 2	PNB 7	PNB 6	PNB 5	PNB 4	PNB 3	PNB 2	PNB 1	PNB 0

Logic Ena = DeviceLogix Enable, PNB = Produced Network Bit (Network Output)

**1791D-0B8P with a 1791-16B0X or 1791-16V0X expansion
(DeviceLogix Assembly)**

	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
Byte 0	In 7	In 6	In 5	In 4	In 3	In 2	In 1	In 0
Byte 1	In 15	In 14	In 13	In 12	In 11	In 10	In 9	In 8
Byte 2	Exp Fault		Logic Ena					
Byte 3	Out 7	Out 6	Out 5	Out 4	Out 3	Out 2	Out 1	Out 0
Byte 4	PNB 7	PNB 6	PNB 5	PNB 4	PNB 3	PNB 2	PNB 1	PNB 0

Exp Fault = Expansion Fault, Logic Ena = DeviceLogix Enable, PNB = Produced Network Bit (Network Output)

**1791D-0B8P with a 1791-0B16PX or 1791-0V16PX expansion
(DeviceLogix Assembly)**

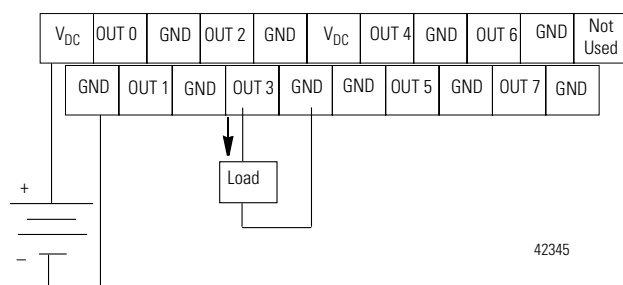
	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
Byte 0	Exp Fault		Logic Ena					
Byte 1	Out 7	Out 6	Out 5	Out 4	Out 3	Out 2	Out 1	Out 0
Byte 2	Out 15	Out 14	Out 13	Out 12	Out 11	Out 10	Out 9	Out 8
Byte 3	Out 23	Out 22	Out 21	Out 20	Out 19	Out 18	Out 17	Out 16
Byte 4	PNB 7	PNB 6	PNB 5	PNB 4	PNB 3	PNB 2	PNB 1	PNB 0

Exp Fault = Expansion Fault, Logic Ena = DeviceLogix Enable, PNB = Produced Network Bit (Network Output)

The DeviceNet Network uses advanced network technology, producer/consumer communication, to increase network functionality and throughput. Visit our Web site at <http://www.ab.com/networks> for producer/consumer technology information and updates.

Wiring Connections

Output Wiring Diagram for 1791D-0B8P



Specifications

Sourcing Outputs	
Outputs per Block	8
On-state Voltage Range	10 - 30V dc
On-state Voltage Drop	0.5V dc @ rated current
On-state Current	0.5A maximum
Off-state Leakage	1.0mA maximum
Module Current (all outputs)	4.0A maximum
Surge Current - for 10ms, repeatable every 2 s	1.0A maximum

General Specifications	
Indicators	Mod/Net status - red/green Logic status - green I/O status - yellow
Communication Rate Thick Cable	125Kbps @ 500m (1600ft) 250Kbps @ 200m (600ft) 500Kbps @ 100m (330ft)
Flat Media	125Kbps @ 420m (1230ft) 250Kbps @ 200m (490ft) 500Kbps @ 75m (245ft)
Isolation I/O to DeviceNet I/O group-to-group I/O group-to-logic	500V ac 500V ac 500V ac
DeviceNet Power Voltage Current	11V - 25 V dc 200mA maximum (with expansion)
Auxiliary Power Voltage Current	10 - 30V dc 4A maximum
Base Module Dimensions	150mm X 48mm X 38mm 5.91 in X 1.9 in X 1.5 in
Environmental Conditions Operating Temperature Non-Operating Temperature Relative Humidity Operating Shock Non-operating Shock Vibration	0 to 60°C (32 to 140°F) -40 to 85°C (-40 to 185°F) 5-95% non-condensing 30g 50g tested 5g @ 10-500Hz per IEC 68-2-6
Conductors Wire Size Category	14 gauge (2mm ²) stranded maximum 3/64 inch insulation maximum 2 ^{1, 2}
Product Certifications	UL, UL Hazardous Class I, Div 2, Groups A, B, C, D. C-UL, C-UL Hazardous Class I, Div 2, Groups A, B, C, D. CE marked for all applicable directives
Enclosure	IEC IP20

¹ Use this conductor category information for planning conductor routing as described in the system level installation manual.

² Refer to, Programmable Controller Wiring and Grounding Guidelines, publication 1770-4.1.