



II. Installation

The 1492 Conversion Modules must be installed in a 1492 Conversion Mounting Assembly (see Table 1 below). A complete System Installation Manual ships with the 1492 Conversion Mounting Assembly.

- 1) Determine the quantity of each type of 1771 I/O modules used in the 1771 I/O Chassis to be converted.
- 2) Select the applicable 1492 Conversion Modules from Table 2, Section III.
- 3) Review the Max Slots for I/O and Chassis Width data from the Table 1 below.
- 4) Select a 1756 I/O Chassis which has enough I/O Slots.

NOTE: (2) I/O slots are required in the 1756 Chassis for conversions where (1) 1771 I/O module converts to (2) 1756 I/O modules.

- 5) Select the 1492 Conversion Mounting Assembly which has enough Conversion Module slots.

NOTE: (2) Conversion Module slots are required in the 1492 Conversion Mounting Assembly for conversions where (2) 1771 I/O module convert to (1) 1756 I/O modules.

NOTE: The 1492 Conversion Mounting Assembly has the same Height & Width foot-print as the 1771 Chassis and is designed to use the same mounting hardware. The combined Depth of the 1492 Conversion Mounting Assembly with the 1756 Chassis mounted on top is 10.25 inches (Controller w/key) or 10.0 inches (Controller w/o key). Dimension drawings are included in the System Installation Manual that ships with the 1492 Conversion Mounting Assembly.

Table 1: Bulletin 1771 to 1756 Chassis Conversion

1771 Chassis				1756 Chassis			Conversion Mounting Assembly		
Cat. No.	Max Slots for I/O	Chassis Width ^②		Cat. No.	Max Slots for I/O	Chassis Width	Cat. No.	Max Slots for Conversion Modules	Chassis Width
		without Power Supply	with Power Supply						
1771-A1B	4	9.01	12.61	1756-A4	3	10.35	1492-MUA1B-A4-A7	4	9.01
				1756-A7	6	14.49			
1771-A2B	8	14.01	17.61	1756-A7	6	14.49	1492-MUA2B-A7-A10	8	14.01
				1756-A10	9	19.02			
1771-A3B1 ^①	12	19.01		1756-A10	9	19.02	1492-MUA3-A10-A13	12	19.01
				1756-A13	12	23.15			
1771-A4B	16	24.01		1756-A13	12	23.15	1492-MUA4-A13-A17	16	24.01
				1756-A17	16	29.06			

Foot Notes:

① 1771-A3B is not listed as it is used for 19 inch wide instrumentation panels.

② Notice that the 1756 Chassis Width sometimes exceeds the 1771 Chassis Width, with or without the Power Supply. The Cover-Plate of the 1492 Conversion Mounting Assembly allows the 1756 Chassis to be Left justified, Right justified or Centered. A complete System Installation Manual ships with the 1492 Conversion Mounting Assembly.

III. Compatibility

Table 2: Bulletin 1771 to 1756 Conversion Modules and Cables

1771 Digital I/O Module ^①	1756 Digital I/O Module ^①	1492 Conversion Module	1492 Cable ^②
1771-OBN	1756-OB32	1492-CM1771-LD009F ^③	1492-CONCAB005Z

Foot Notes:

- ① To understand any issues concerning I/O module compatibility, refer to the Installation Manuals for the specific 1771 and 1756 I/O modules involved.
- ② The 3 numbers indicate the cable length of each portion of the 1492 Cable. Recommended cable lengths of 0.5M are shown. Additional cable lengths are as follows:
1.0M = 1492-CONCAB010Z
- ③ To maintain the functionality of the 1771-OBN module the Conversion Module provides 4 mechanical fuses, 1 for each DC+. Refer to the Wiring Diagram for further details.

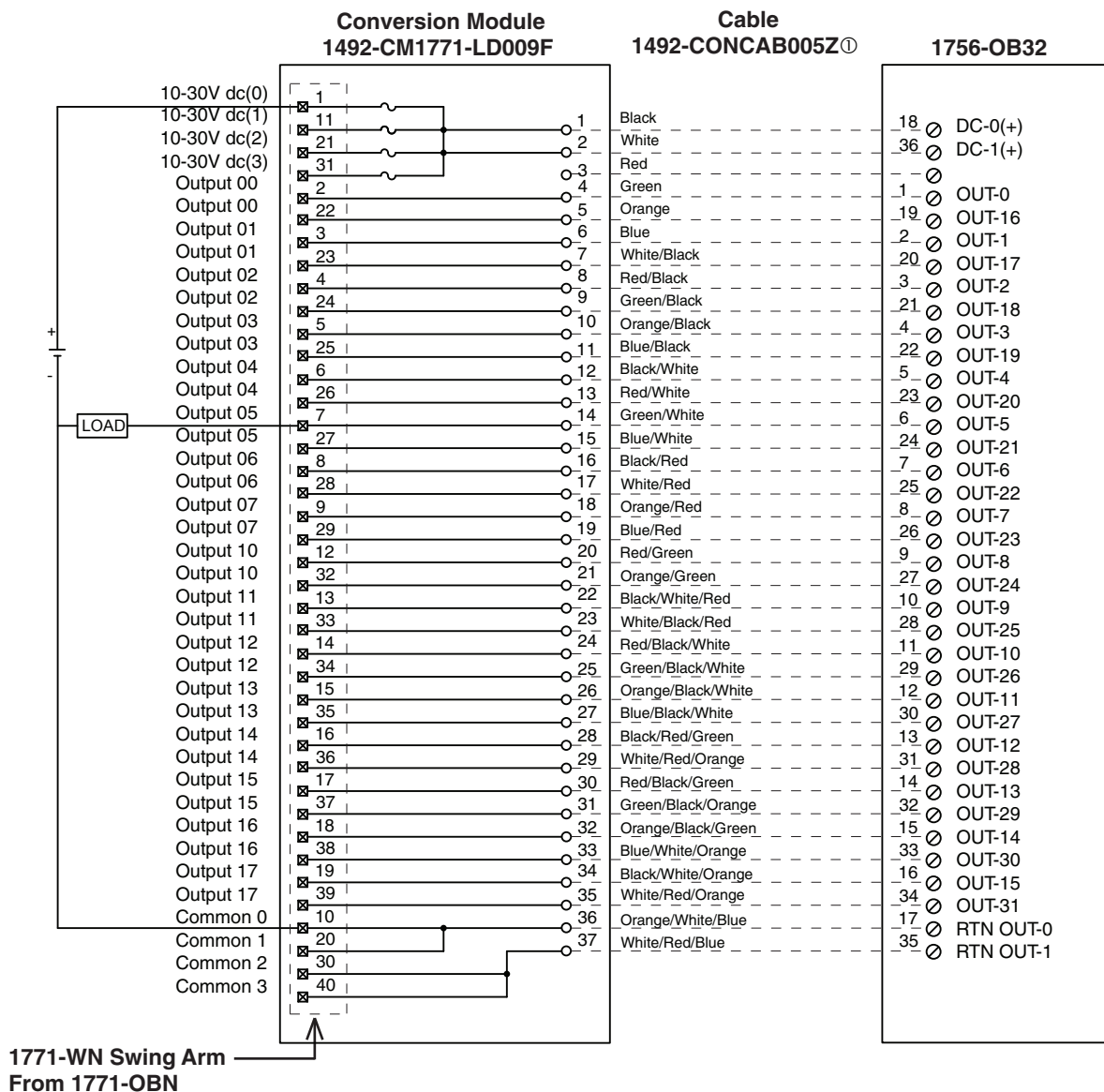
IV. Conversion Module Specifications

(Operating specifications are when installed in the Conversion System base / cover-plate assembly)

Specification	Value
Dimensions	11.81 in. (height) x 4.38 in. (depth) x 1.5 in. (width) 300 mm. (height) x 111.25 mm (depth) x 38.1 mm (width)
Approximate Shipping Weight	246.9 g (0.54 lbs) (includes carton)
Storage Temperature	-40 to +85°C (-40 to +185°F)
Operating Temperature	0 to 60°C (32 to 140°F)
Operating Humidity	5 to 95% at 60°C (non-condensing)
Shock	
Non operating	50g
Operating	30g
Operating Vibration	2g at 10 to 500Hz (Agrees with 1756 I/O module specifications)
Maximum Operating Voltage	32 Vdc
Max. Module Operating Current	
Per Point:	2 Amps
Per Module:	6 Amps
	NOTICE Refer to the Wiring Diagram(s) for current limits for a specific configuration.
Fusing	Four, 4 Amps (maximum current based on conversion components)
Agency Certifications	UL Classified: Under UL File Number E113724 CSA CE: compliant for all applicable directives
Pollution Degree	2
Environmental Rating	IP20

**WARNING**

There are several key application considerations and system specifications (bottom of drawing) when using these components (conversion module, cable and input module). Read and understand these considerations before installation.

**Conversion Module Installation and Application Considerations**

① The 1771-OBN module output current limits versus 1756-OB32 limits are as follows:

	1771-OBN	1756-OB32w/1492-CONCAB005Z
a) Current/Point	0.5A	0.35A @ 60°C
b) Current/Module	8A	6A @ 60°C
c) Surge Current/Point	2A for 10ms	1A for 10ms

② The 1771-OBN has four (4) 4A, 250V rectifier fuses. The 1756-OB32 is NOT fused, as such four (4) 2AG fuse clips and 4A fuses are provided on the 1492-CM1771-LD009F conversion module.

③ The 1492-CONCAB005Z is limited to 3A per pin.

④ The 1771-OBN has 4 groups (allowing 4 separate power supplies) and the 1756-OB32 has 2 groups. This module/cable combination ties Groups 0 & 1 from the 1771-OBN to Group 0 on the 1756-OB32 and Groups 2 & 3 from the 1771-OBN to Group 1 on the 1756-OB32. Field wiring modification must be made to accommodate this if multiple supplies were used. If 4 supplies were used, 2 must be removed.

⑤ Refer to your 1771-OBN and 1756-OB32 Installation Manual wiring schematics and diagrams for more details. Ensure

1756 output module ratings are not exceeded.

[Reference Doc: 41170-938 (Version 01)]

VI. Fuse Installation and Replacement

The 1492-CM1771-LD009F conversion module has four (4) mechanical fuse holders with fuses located on the circuit board inside the modules plastic case. The following explains how to replace the fuses.

- 1) Remove the 4 screws that hold both halves of the conversion module case together (refer to the following Figure A).

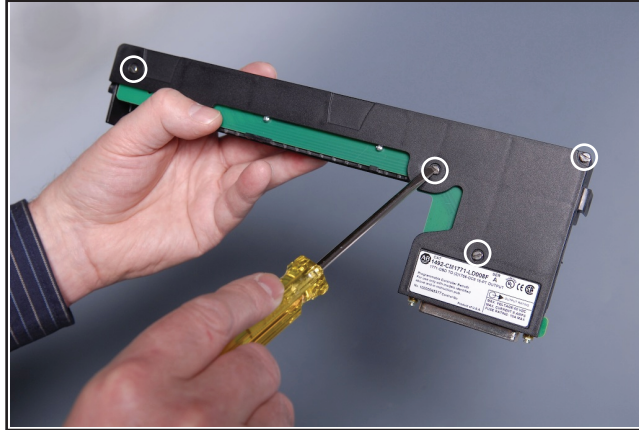


FIGURE A

- 2) Disassemble both case halves so you can access the module's circuit board. Remove and replace the fuse or fuses (refer to the below Figure B).

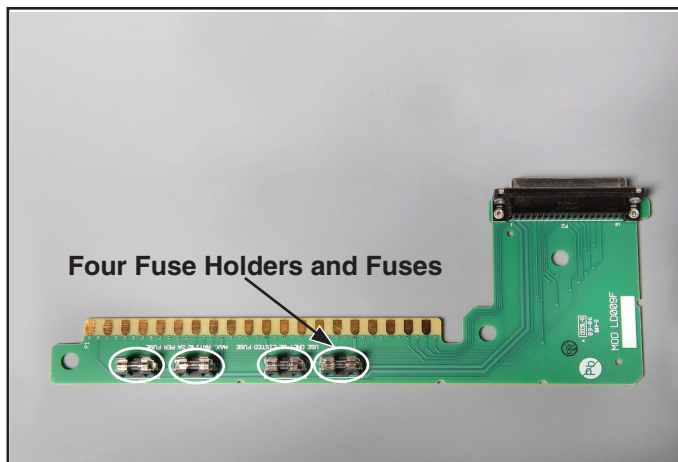


FIGURE B

- 3) Reassemble the two case halves to the circuit board and replace the four screws that hold the case together (Do NOT over torque the screws (Maximum torque is 5.0 in-lbs.)

NOTES:

- 1) For module operation a fuse must be inserted into the fuse holder
- 2) Physical Fuse Size: 2AG
- 3) Possible Fuse Supplier: Littelfuse (Part Number: 225004P)
- 4) Maximum Fuse Current rating based on Conversion System Components: 4.0 Amps

