



**Bulletin 1492 I/O Wiring Conversion System
Bulletin 1771 to ControlLogix 1756**

I/O Conversion Modules provide a fast and efficient method for converting Bul. 1771 I/O to Bul. 1756 I/O. The I/O conversion is accomplished without removing any field wires from the existing Bul. 1771 Swing Arm, virtually eliminating the risk of wiring errors. The existing Bul. 1771 Swing Arms fit directly onto the edge connector of the Bul. 1492 Conversion Modules.

The Bulletin 1492 Cables are pre-wired and have a connector for the Bul. 1492 Conversion Module on one end and a Bul. 1756 RTB (Removable Terminal Block) on the other end. The I/O signals are routed through the Bul. 1492 Conversion Module and the Bul. 1492 Cable to the appropriate terminals on the Bul. 1756 I/O module.

The I/O Conversion System includes:

- Conversion Modules (Ex: Cat No: 1492-CM1771-LD001)
- Cables (Ex: Cat No: 1492-CONACAB005X)
- Conversion Mounting Assembly (Ex: Cat No: 1492-MUA4-A13-A17)

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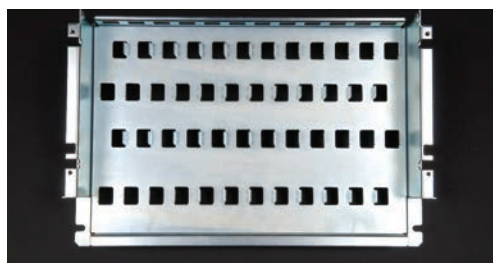
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* See publication
1492-SG121* for wiring
diagrams and approximate
dimensions.

Conversion Modules and Cables

The Bulletin 1492 I/O Wiring Conversion System virtually eliminates the time and risk associated with the normal “rip and replace” rewiring process by using Conversion Modules instead. The Conversion Modules provide the mating connections (edge connectors) to the specific 1771 I/O Swing Arms. This allows the field wires to remain attached to the 1771 Swing Arm, eliminating the time and risk normally associated with converting from one I/O system to another. The I/O signals are routed through to a connector on the 1492 Conversion Module and through the 1492 pre-wired Cable to the appropriate terminals on the 1756 I/O module via the 1756 RTB (Removable Terminal Block) on the other end of the 1492 pre-wired Cable.

*Conversion Modules**Pre-wired 1492 Cables***Conversion Mounting Assembly***Conversion Mounting Assembly (Base Plate)**Conversion Mounting Assembly (Cover Plate)*

The Conversion Modules are housed in a Conversion Mounting Assembly Base Plate. This Base Plate has the same mounting footprint and mounting holes as the 1771 chassis that it replaces. This eliminates the need to drill and tap new mounting holes in the control cabinet.

The Conversion Mounting Assembly Cover Plate covers and protects the Conversion Modules while providing a place to mount the new 1756 chassis. The Cover Plate has pre-drilled and tapped mounting holes allowing the new 1756 chassis to be mounted in several locations – centered, right-justified or left-justified. This eliminates the need to drill and tap new mounting holes in the control cabinet.

Bulletin 1492 Conversion Mounting Assembly

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

Step 1: Determine the quantity of each type of Bul. 1771 I/O modules used in the Bul. 1771 I/O chassis to be converted

Step 2: Select the applicable Bul. 1492 conversion modules from Table 2, Section III

Step 3: Review the Max Slots for I/O and Chassis Width data from the Table 1 below

Step 4: Select a Bul. 1756 I/O chassis which has enough I/O slots

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

Step 5: Select the Bul. 1492 conversion mounting assembly which has enough conversion module slots.

NOTE: (2) conversion module slots are required in the Bul. 1492 conversion mounting assembly for conversions where (2) Bul. 1771 I/O module convert to (1) Bul. 1756 I/O modules.

Step 6: The combined depth of the Bul. 1492 conversion mounting assembly with the Bul. 1756 chassis mounted on top is 10.25 inches (controller w/key) or 10.0 inches (controller w/o key).

Step 7: Dimension drawings are included in the System Installation Manual that ships with the 1492 Conversion Mounting Assembly.

Bulletin 1771 Chassis				Bulletin 1756 Chassis			Bulletin 1492 Conversion Mounting Assembly		
Cat. No.	Max Slots for I/O	Chassis Width* in. (mm)		Cat. No.	Max Slots for I/O	Chassis Width in. (mm)	Cat. No.	Max Slots for Conversion Modules	Chassis Width in. (mm)
		Without Power Supply	With Power Supply						
1771-A1B	4	9.01 (229)	12.61 (320)	1756-A4	3	10.35 (263)	1492-MUA1B-A4-A7	4	9.01 (229)
				1756-A7	6	14.49 (368)			
1771-A2B	8	14.01 (356)	17.61 (447)	1756-A7	6	14.49 (368)	1492-MUA2B-A7-A10	8	14.01 (356)
				1756-A10	9	19.02 (483)			
1771-A3B1 *	12	19.01 (483)		1756-A10	9	19.02 (483)	1492-MUA3-A10-A13	12	19.01 (483)
				1756-A13	12	23.15 (588)			
1771-A4B	16	24.01 (610)		1756-A13	12	23.15 (588)	1492-MUA4-A13-A17	16	24.01 (610)
				1756-A17	16	29.06 (738)			

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

* 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.

Table 3 - Analog Inputs and Outputs

Step 1: In Column 1, find the Cat. No. of the Bulletin 1771 Analog I/O module.

Step 2: In column 2, find the Cat. No. of the compatible Bulletin 1756 Analog I/O module. In some cases more than one module exists. Review the matrix carefully and review the I/O module installation manuals to determine full compatibility.

Step 3: In column 3, find the Cat. No. of the Bulletin 1492 Conversion Module.

Step 4: In column 4, find the Cat. No. of the Bulletin 1492 Cable.

1		2			3		4	
Bulletin 1771 Analog I/O Module*		Bulletin 1756 Analog I/O Module*			Bulletin 1492 Conversion Module		Bulletin 1492 Cable *	
Cat. No.	Qty.	Cat. No.	Description	Qty.	Cat. No.	Order Qty.	Cat. No.	Order Qty.
1771-IFE	1	1756-IF16	Diff Current	1	1492-CM1771-LA002	1	1492-CONACAB005D	1
			Diff Voltage	1	1492-CM1771-LA002	1	1492-CONACAB005C	1
			Sgl End Current	1	1492-CM1771-LA001	1	1492-CONACAB005B	1
			Sgl End Voltage	1	1492-CM1771-LA001	1	1492-CONACAB005A	1
1771-IFF	1	1756-IF16	Diff Current	1	1492-CM1771-LA002	1	1492-CONACAB005D	1
			Diff Voltage	1	1492-CM1771-LA002	1	1492-CONACAB005C	1
			Sgl End Current	1	1492-CM1771-LA001	1	1492-CONACAB005B	1
			Sgl End Voltage	1	1492-CM1771-LA001	1	1492-CONACAB005A	1
1771-IL (8-ch)	1	1756-IF6I (6-ch)	Current	1	1492-CM1771-LA004	1	1492-CONACAB005K	1
			Voltage	1	1492-CM1771-LA004	1	1492-CONACAB005L	1
		1756-IF6I (2 x 4ch)	Current	2	1492-CM1771-LA004	1	1492-CONACAB005T1	1
			Voltage	2	1492-CM1771-LA004	1	1492-CONACAB005T2	1
1771-IR	1	1756-IR6I	—	1	1492-CM1771-LA004	1	1492-CONACAB005F	1
1771-IXE	1	1756-IT6I2	—	1	1492-CM1771-LA005	1	1492-CONACAB005G	1
1771-IXHR	1	1756-IT6I2	—	1	1492-CM1771-LA005	1	1492-CONACAB005G	1
1771-OFE1	1	1756-OF6VI	—	1	1492-CM1771-LA003	1	1492-CONACAB005E	1
1771-OFE2	1	1756-OF6CI	—	1	1492-CM1771-LA003	1	1492-CONACAB005E	1

* To understand any issues concerning I/O module compatibility refer to the conversion module wiring diagrams and the Installation Manuals for the specific I/O modules involved (with particular attention to the specification and wiring instructions).

* The 005 in the Cat. No. indicates cable length of the Bulletin 1492 cable. The recommended length of 0.5 M is listed, additional lengths are listed below.
1.0M Cable = Cat. No. 1492-CONCAB010_