



1771-N Series I/O to 1756 ControlLogix I/O (Cat 1492-CONACAB020N* and 1492-CONACAB050N*)

I. Description of the Existing 1771-N Series I/O Wiring System

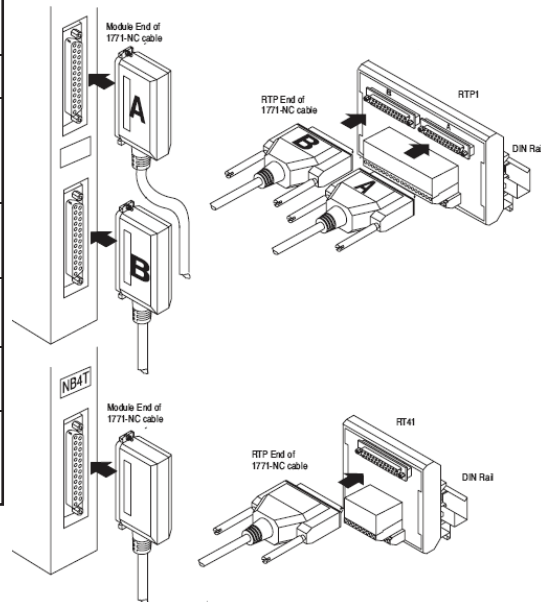
The 1771-N Series High Resolution Isolated Analog I/O modules were designed to be used with 1771 Remote Termination Panels (RTPs) and connected by a 6ft or 15ft cable, as follows.

Catalog Number: 1771-NC6 (6 ft) or 1771-NC15 (15 ft) cables.

Variations of remote termination panels are used, depending on the type of module used. These are:

| Catalog Number | Description |
|---|---|
| 1771-RTP1 | has cold junction compensation for thermocouples |
| 1771-RTP3 | incorporates resistors and fuses; used primarily for 4 - 20mA inputs when using $\pm 5V$ inputs (Uses 5mm x 20mm fast acting 1/4A fuses such as Bussmann GMA-1/4, 250V / 250mA) |
| 1771-RTP4 | a general use block with straight-thru wiring that can be used for all applications except thermocouples |
| 1771-RT41 | a 4-channel block with cold junction compensation for thermocouples |
| 1771-RT44 | a general use 4-channel block with straight-thru wiring that can be used for all applications except thermocouples |
| RTP4 and RT44 can be used with thermocouples if a method of odd junction compensation is provided at the interface of thermocouple and copper wires within the system | |

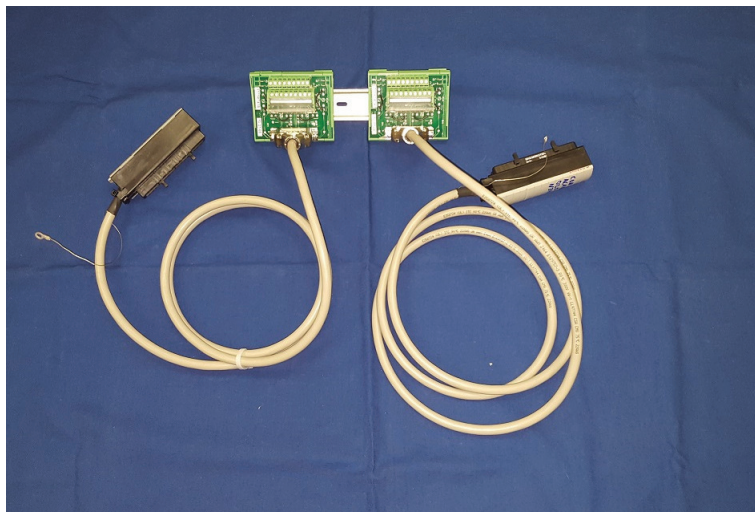
The remote termination panels are designed for mounting on standard DIN 1 or DIN 3 mounting rails.



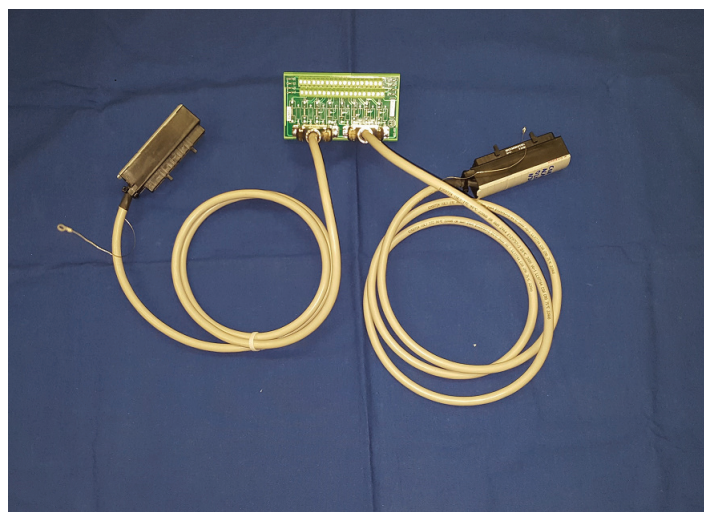
| Module | Channel 1 | Channel 2 | Channel 3 | Channel 4 | Channel 5 | Channel 6 | Channel 7 | Channel 8 |
|-----------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| 1771-NIS | 4 - 20mA | 4 - 20mA | 4 - 20mA | 4 - 20mA | 4 - 20mA | 4 - 20mA | 4 - 20mA | 4 - 20mA |
| 1771-NIV | $\pm 5V$ ($\pm 20mA$) | $\pm 5V$ ($\pm 20mA$) | $\pm 5V$ ($\pm 20mA$) | $\pm 5V$ ($\pm 20mA$) | $\pm 5V$ ($\pm 20mA$) | $\pm 5V$ ($\pm 20mA$) | $\pm 5V$ ($\pm 20mA$) | $\pm 5V$ ($\pm 20mA$) |
| 1771-NIV1 | $\pm 10V$ | $\pm 10V$ | $\pm 10V$ | $\pm 10V$ | $\pm 10V$ | $\pm 10V$ | $\pm 10V$ | $\pm 10V$ |
| 1771-NIVR | $\pm 5V$ ($\pm 20mA$) | $\pm 5V$ ($\pm 20mA$) | $\pm 5V$ ($\pm 20mA$) | $\pm 5V$ ($\pm 20mA$) | RTD | RTD | RTD | RTD |
| 1771-NIVT | $\pm 5V$ ($\pm 20mA$) | $\pm 5V$ ($\pm 20mA$) | $\pm 5V$ ($\pm 20mA$) | $\pm 5V$ ($\pm 20mA$) | $\pm 100mV$ /TC | $\pm 100mV$ /TC | $\pm 100mV$ /TC | $\pm 100mV$ /TC |
| 1771-NR | RTD | RTD | RTD | RTD | RTD | RTD | RTD | RTD |
| 1771-NT1 | $\pm 100mV$ /TC | $\pm 100mV$ /TC | $\pm 100mV$ /TC | $\pm 100mV$ /TC | $\pm 100mV$ /TC | $\pm 100mV$ /TC | $\pm 100mV$ /TC | $\pm 100mV$ /TC |
| 1771-NT2 | -5 /+55mV /TC | -5 /+55mV /TC | -5 /+55mV /TC | -5 /+55mV /TC | -5 /+55mV /TC | -5 /+55mV /TC | -5 /+55mV /TC | -5 /+55mV /TC |
| 1771-NOC | 0 - 25mA out | 0 - 25mA out | 0 - 25mA out | 0 - 25mA out | 0 - 25mA out | 0 - 25mA out | 0 - 25mA out | 0 - 25mA out |
| 1771-NOV | $\pm 10V$ out | $\pm 10V$ out | $\pm 10V$ out | $\pm 10V$ out | $\pm 10V$ out | $\pm 10V$ out | $\pm 10V$ out | $\pm 10V$ out |

II. Description of the Conversion Solution

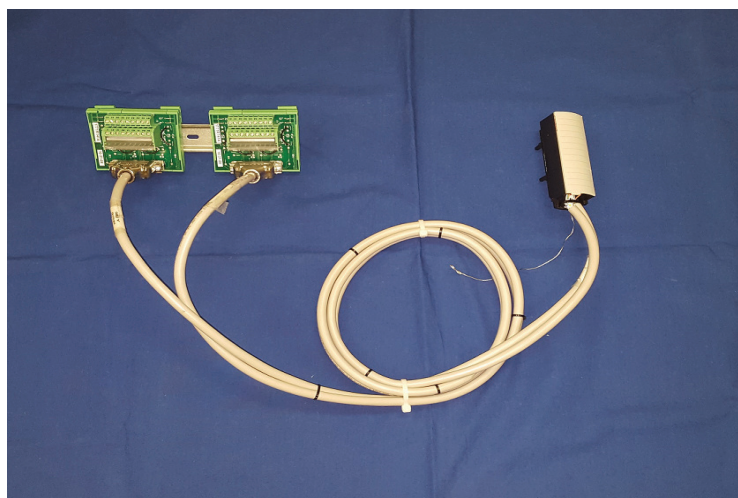
This conversion from the 1771-N Series I/O to a 1756 ControlLogix I/O is accomplished simply by replacing the (2) existing cables A & B with (1 or 2) of the following new 1492 cables. Each of these cables has a connector on one end that attaches directly to the existing 1771 RTP. On the other end of the new cable is (1) 1756 Removable Terminal Block (RTB) for connection to the new 1756 ControlLogix I/O Module. The I/O signals are routed from the existing 1771 RTP through the 1492 cables to the appropriate terminals on the 1756 I/O module, per the Wiring Diagrams in this Installation Manual. This allows the conversion to be completed without the removal of any field wires from the existing 1771-RTP.



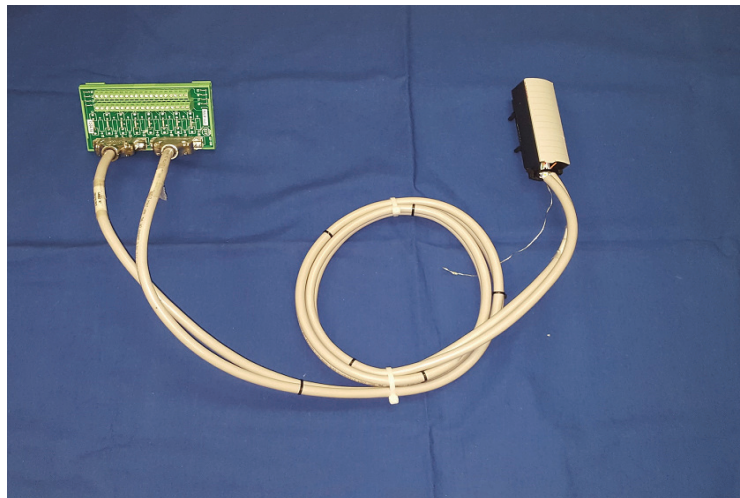
Cable Catalog Numbers:
1492-CONACAB020N5
1492-CONACAB020N6



Cable Catalog Numbers:
1492-CONACAB020N1 1492-CONACAB020N34
1492-CONACAB020N2 1492-CONACAB020N44
1492-CONACAB020N3 1492-CONACAB020N54
1492-CONACAB020N4 1492-CONACAB020N74
1492-CONACAB020N5
1492-CONACAB020N7



Cable Catalog Numbers:
1492-CONACAB020N68



Cable Catalog Number:
1492-CONACAB020N8
1492-CONACAB020N88
1492-CONACAB020N38
1492-CONACAB020N78
1492-CONACAB020N48
1492-CONACAB020N18