

PLC/DCS Communications Configuration



IND780 Q.iIMPACT Terminal

IND780 Q.iIMPACT Bulletin 02

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IND780 Q.i terminal comes standard with two PLC/DCS communications modes – classic and enhanced. The terminal defaults to the classic mode, compatible with the Q.i application on the JAGXTREME® terminal.

Shared Data Variable PL0130 is used to configure the IND780 Q.i for communication with the PLC. The unit comes configured with a default value of 0.

Value	Function
0	Use default instance numbers for Qi ControlNet and Ethernet/IP PLC links where 100 = Cyclic Assembly Input to PLC (T-O) and 150 = Cyclic Assembly Output from PLC (O-T). Classic T-O assembly length is 496 bytes and classic O-T assembly length is 4 bytes.
1	 Use JAGX Qi Retro instance numbers for Qi ControlNet and Ethernet/IP PLC links where 10 is Cyclic Assembly Input to PLC (T-O) and 255 = Cyclic Assembly Output from PLC (O-T). Classic T-O assembly length is 496 bytes and classic O-T assembly length is 4 bytes.
2	 Use JAGX Qi Retro instance numbers for Qi Honeywell ControlNet Links where 10 is Cyclic Assembly Input to PLC (T-O) and 2 = Cyclic Assembly Output from PLC (O-T). Classic T-O assembly length is 496 bytes and classic O-T assembly length is 22 bytes.
3	Use JAGX Qi Retro instance numbers for Qi Honeywell ControlNet Links where 10 is Cyclic Assembly Input to PLC (T-O), and Cyclic Assembly Output from PLC (O-T) comes from Shared Data field bx0176. Classic T-O assembly length is 496 bytes and classic O-T assembly length comes from Shared Data field bx0175.



Selecting a value of 1 makes the IND780 Q.i compatible with historic JAGXTREME Q.i AIM.



Selecting a value of 2 makes the IND780 Q.i compatible with historic JAGXTREME Q.i Honeywell Function Block.

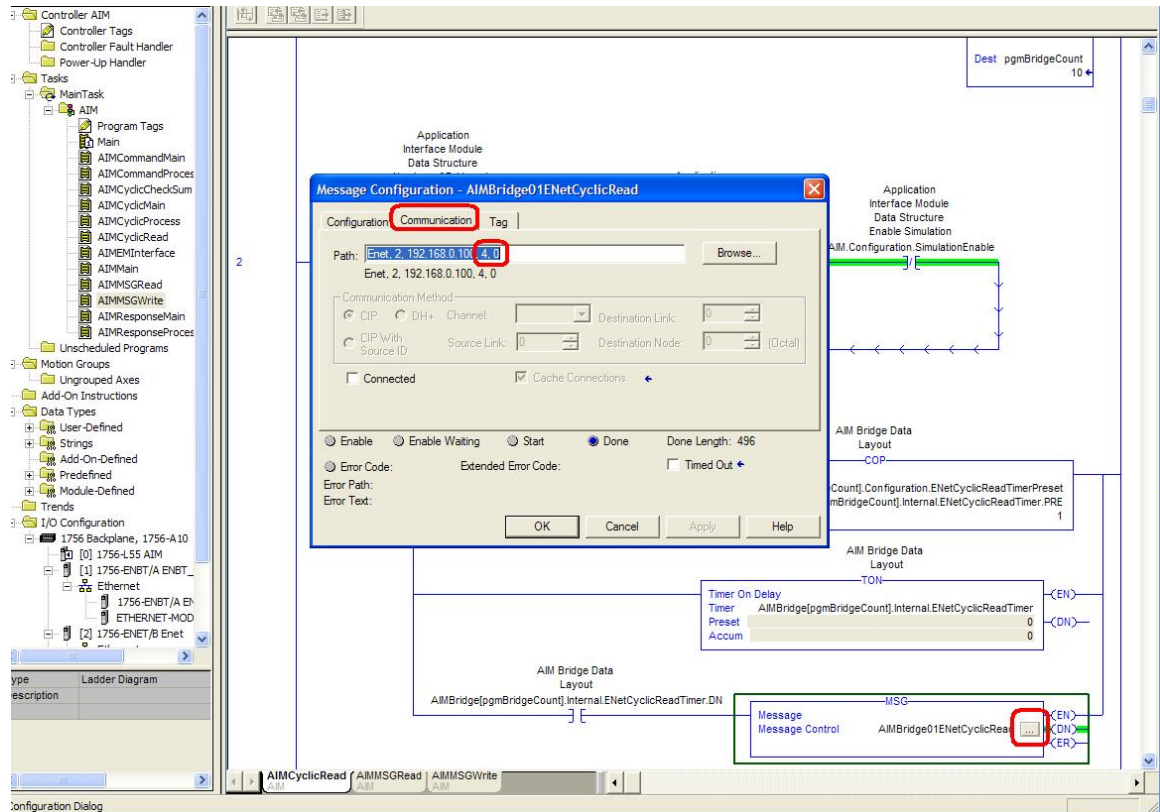
The following values can be used for additional output configurations:

bx0175	Out from PLC Assembly Length	UL	User can set this value when pl0130 = 3
bx0176	Out from PLC Assembly Instance #	By	User can set this value when pl0130 = 3

Additional AIM Configuration Information for Ethernet/IP

The addressing for the IND780 Q.i differs slightly from the JagXtreme Q.i when it comes to setting up the target path for unscheduled messages in the AIM. To switch from using a JagXtreme Q.i to using an IND780 Q.i, a minor change to the address string in each message instruction must be made.

The screen image below shows the **Communication** tab of a typical message instruction. Notice the **“,4,0”** at the end of the Path string. This must be removed from the Path string before the AIM can communicate successfully with the IND780 Q.i using unscheduled messages.



Message instructions in the following AIM routines are affected:

- AIMCyclicRead
- AIMMSGRead
- AIMMSGWrite

Contact information

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