

iControl[®] Opto-Input Interface Card Replacement

This instruction sheet is to help guide the procedure needed to replace the iControl[®] opto-input interface card.



WARNING: Allow only qualified personnel to perform the following tasks. Follow the safety instructions in this document and all other related documentation.

Removing Interface Card



WARNING: Shut off all power to the system before beginning any procedures.

1. See Figure 1. Disconnect the 25 conductor cable wiring at interface card. Also disconnect the “conveyor interlock” wiring from input 24 of the interface card.
2. Disconnect the ribbon cable from the interface card and the computer. Discard the ribbon cable.
3. Remove the four screws (1) securing the interface card. Save the screws to install the new interface card.

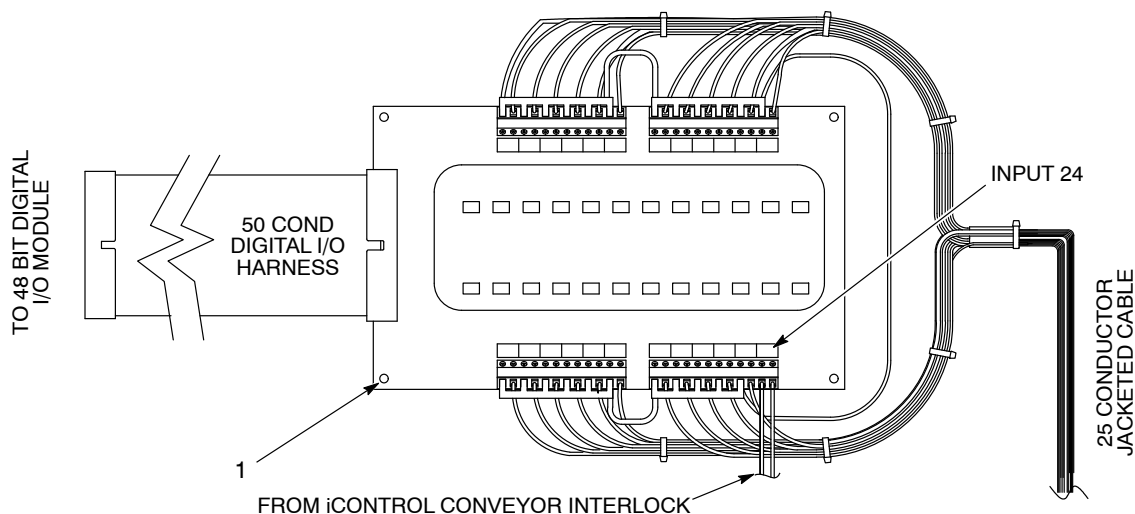


Figure 1 Old Interface Card with Wiring and Ribbon Cable Connections

Installing New Interface Card

1. See Figure 2. Install the new interface card using the same four screws from the removal procedure.



CAUTION: Plugging in a ribbon cable the wrong way may damage the cable or circuit boards when power is applied. Reversing the ribbon cable polarity of the cable from the iControl computer to the interface card will cause catastrophic failure of the iControl unit. Make sure the cables are connected correctly. The ribbon cables are keyed so that they can only be plugged in one way.

2. The new ribbon cable has a red or blue tracer that designates the pin 1 side of the cable. Plug the cable into the interface card with the tracer aligned with pin 1 on the board. Pin 1 is designated by a 1 printed on the interface card and a square on the computer.

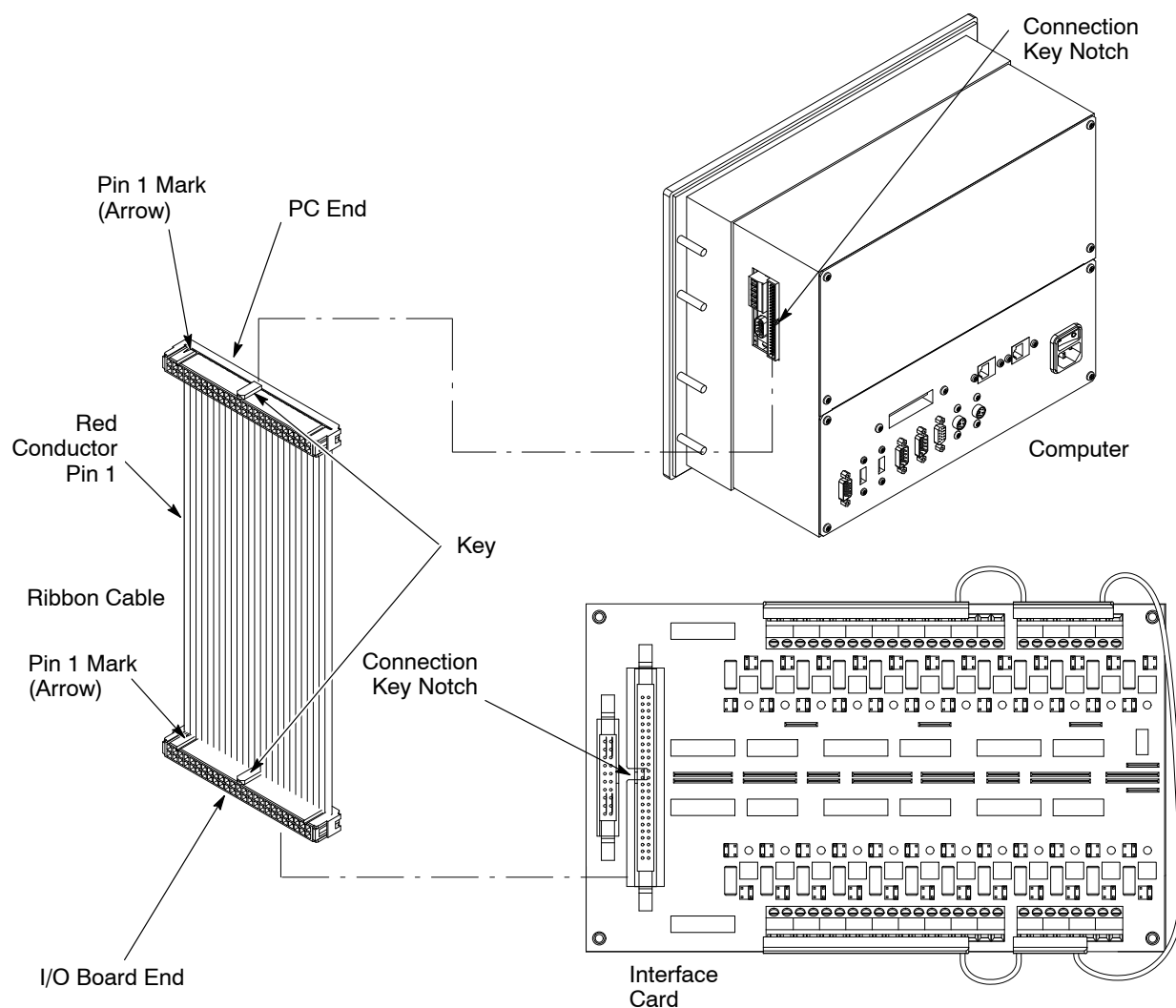


Figure 2 Computer and Interface Card Cable Connections

Installing New Interface Card *(contd)*

- Refer to Table 1 with Figure 3 to complete wiring to the interface card. Reconnect the wires of the 25 conductor cable and two wires connecting internally to the iControl for the "Conveyor Interlock".

NOTE: A blank Compact Flash card is included in the replacement kit to make a backup of the current data card.

Table 1 iControl Discrete Input Cable Color Code Assignments

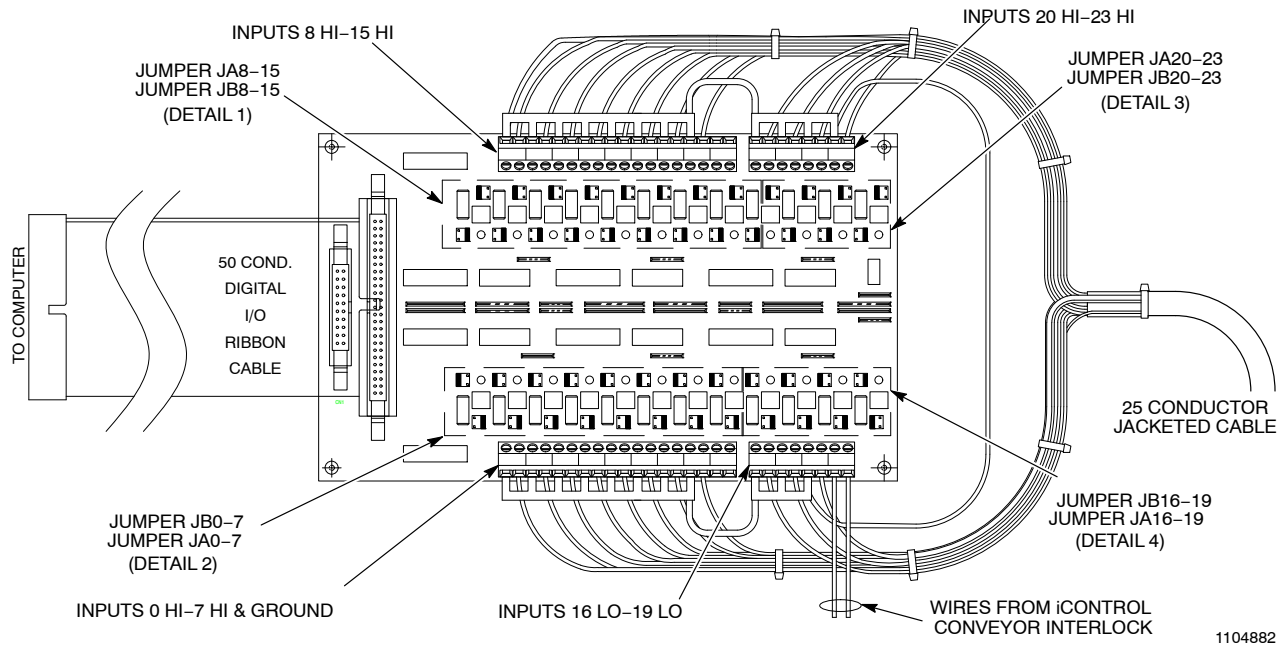
CABLE COLOR	INPUT BOARD TERMINAL	FIELD TERMINAL NUMBER	FUNCTION	NOTE
BLK	8 LO	1	ZONE 1	
WHT	9 LO	2	ZONE 2	
GRN	10 LO	3	ZONE 3	
ORG	11 LO	4	ZONE 4	
BLU	12 LO	5	ZONE 5	
WHT/BLK	13 LO	6	ZONE 6	
RED/BLK	14 LO	7	ZONE 7	
GRN/BLK	15 LO	8	ZONE 8	
ORG/BLK	20 LO	9	PART ID bit 1	
BLU/BLK	21 LO	10	PART ID bit 2	
BLK/WHT	22 LO	11	PART ID bit 3	
RED/WHT	23 LO	12	PART ID bit 4	
GRN/WHT	0 LO	13	PART ID bit 5	
BLU/WHT	1 LO	14	PART ID bit 6	
BLK/RED	2 LO	15	PART ID bit 7	
WHT/RED	3 LO	16	PART ID bit 8	
ORG/RED	4 LO	17	SPARE	
BLU/RED	5 LO	18	SPARE	
RED/GRN	6 LO	19	SPARE	
ORG/GRN	7 LO	20	ENCODER A	
BLK/WHT/RED	16 LO	21	ENCODER B	
WHT/BLK/RED	17 LO	22	SPARE	
RED/BLK/WHT	18 LO	23	SPARE	
GRN/BLK/WHT	N/C	--	----	
BLUE FROM FRONT PANEL	19 HI	--	CONVEYOR I-LOCK	A
WHITE FROM FRONT PANEL	19 LO	--	CONVEYOR I-LOCK	A
RED	8 HI	(+)	VDC	B

NOTE A: These two wires are not a part of the 25 conductor cable. They are connected internally to the iControl for the *Conveyor Interlock*.

B: All the red wire jumpers and the comb jumpers of the interface card are electrically connected to +24 Vdc.

Installing New Interface Card *(contd)*

4. Use Table 2 and Figures 3 and 4 to configure jumpers and comb jumpers.



1104882

Figure 3 New Interface Card with Wiring and Ribbon Cable Connections

Table 2 Jumper Settings

Jumpers	Position
JA0 – JA18	I
JA20 – JA23	I
JA19	N
JB0 – JB18	I
JB20 – JB23	I
JB19	N

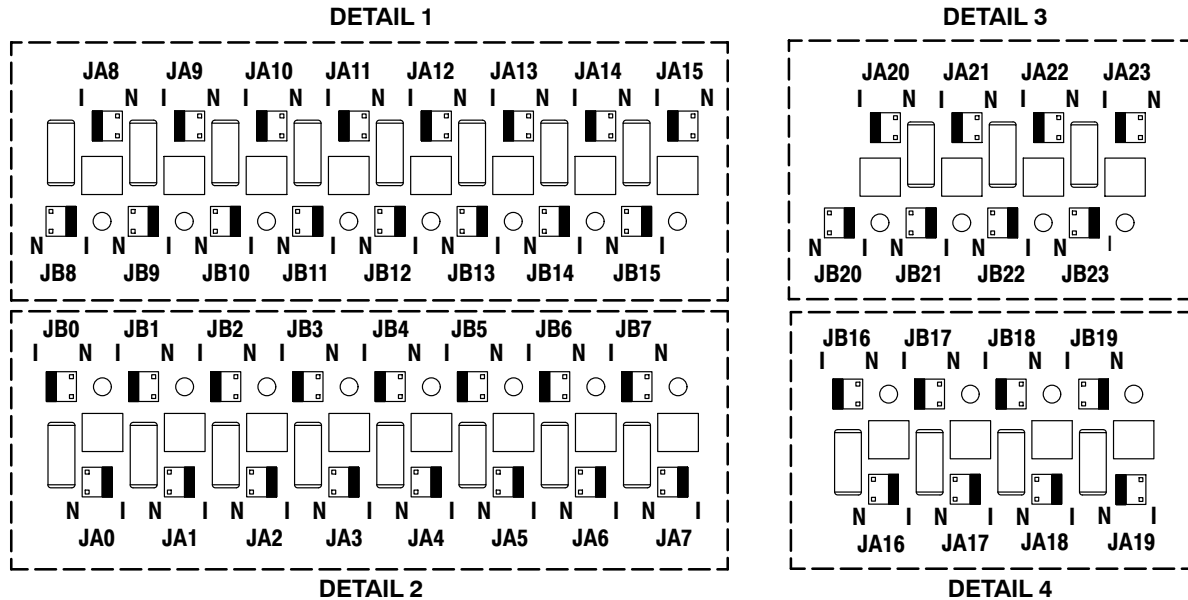


Figure 4 Jumper Detail

Configure iControl to Digital Interface Card

Verify the new iControl is properly configured for the new digital interface card, go to the *Gun Configuration* screen (see Figure 5) and select the digital input card for *PCLD782*.

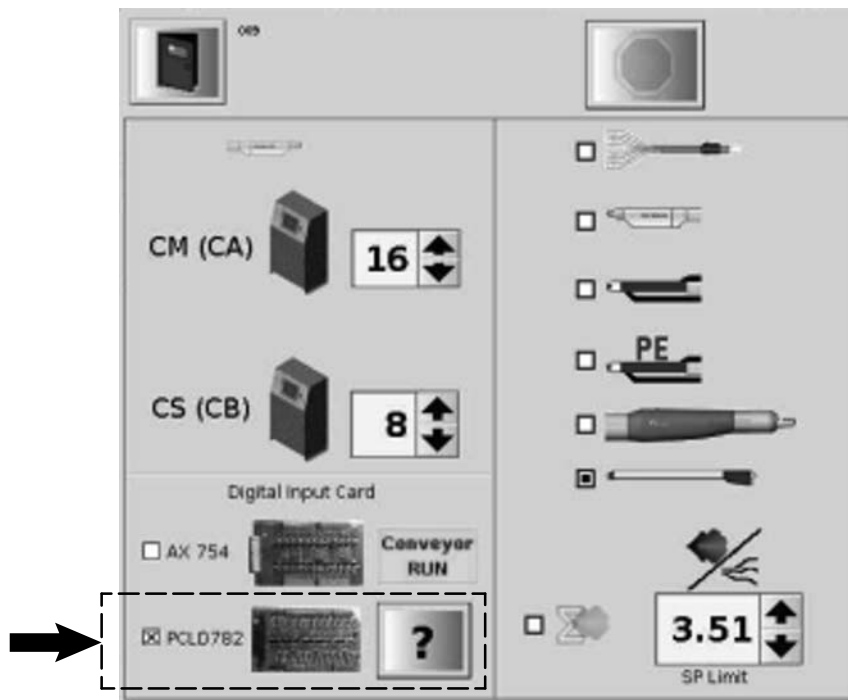


Figure 5 Gun Configuration Screen with Digital Input Card Selected

Parts

To order parts, call the Nordson Finishing Customer Support Center at (800) 433-9319 or your local Nordson representative.

Part	Description	Quantity	Note
1107140	KIT, 24 channel opto-input interface card, legacy	1	
1107147	• CABLE, ribbon, 20 in, iControl	1	
-----	• MODULE, 24 channel opto isolated DI	1	
1107146	• JUMPER, comb-style, 12 pole, 10 mm spacing	2	
1034283	• MEMORY, programmed, iControl	1	
1034281	• MEMORY, compact flash	1	A
NOTE A: Included to make a backup of the current data card.			

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