

Connectors

The main controller board provides the following connections.

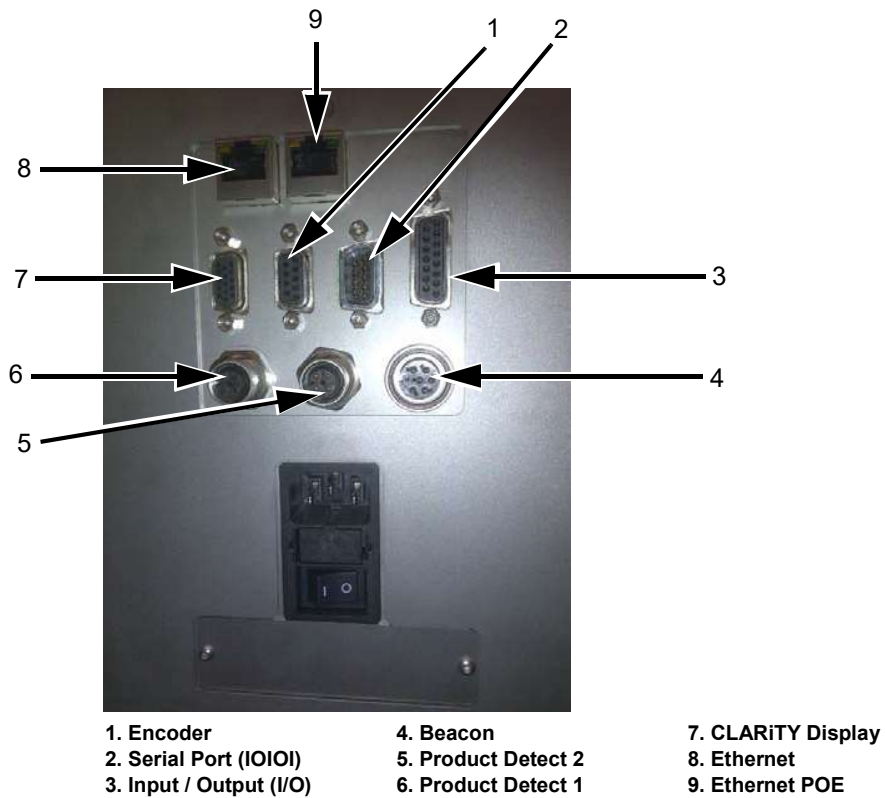


Figure 3-10: Connector



Ports	Connectors	Description
Encoder		Port for connecting a shaft encoder to the controller to tell the software how fast the substrate is traveling.
Serial Port (IOIOI)		RS-232 Serial Port for connecting to PC, PLC or other capable device.

Table 3-1: Controller Connections








Ports	Connectors	Description
Input/Output (I/O)		Port for connecting external devices to the LPA's hardware inputs and outputs.
Beacon		Port for connecting external beacon. For more details, refer to the IPL chapter of Service Manual.
Product Detect 2		Second product detector connector is used for barcode scanning.
Product Detect 1		The product detector connector detects the product and informs the LPA when to print and apply the label on the product.
CLARITY Display		Port for Communicating with the CLARITY Display and provides power to it.
Ethernet		RJ-45 port for connecting the printer to a TCP/IP network
Ethernet POE		RJ-45 port for connecting the printer to a TCP/IP network device that requires Power Over Ethernet (POE) support.

Table 3-1: Controller Connections (Continued)

Note: When an applicator is purchased then additional connector(s) are provided as required.

Pin Description for Connectors

Encoder



Figure 3-11: Encoder Pin

Encoder	Cable Pin	Wire Color	Function
1	1	Red	+24 V ENC
2	2	Black	0 V QENC
3	3	White	ENC AX
4	4	Green	ENC BX
5	5	-	-
6	6	-	-
-	7	Link to Pin 8	Enc Present
-	8	Link to Pin 7	-
-	9	-	-
7	SHELL	BRAID SHIELD	CHASSIS

Table 3-2: Encoder Pin

Input / Output



Figure 3-12: Input/Output

Cable Pin (15 pos) DSUB	Wire Color (Alpha-Wire)	Function
1	Black	LINE SEL BCD0
2	White	LINE SEL BCD1
3	Red	LINE SEL BCD2
4	Green	LINE SEL BCD3 / LINE INTERLOCK
5	Orange	LINE STROBE
6	Blue	IGNORE PACK
7	White/Black	0 V IO
8	Red/Black	+24 V APPL
9	Green/Black	LINE INT'LK COM
10	Orange/Black	LINE INT'LK N/C
11	Blue/Black	LINE INT'LK N/O
12	Black/White	REJECT OUT
13	Red/White	READY / BUSY OUT
14	Green/White	0 V
15	DRAIN WIRE	0 V

Table 3-3: Input/Output

Beacon



Figure 3-13: Beacon Pin

Cable Pin	Wire Color	Function
1	Green	24 V, 50 mA, PNP
2	Yellow	Not connected
3	Red	24 V, 50 mA, PNP
4	Amber	24 V, 50 mA, PNP
5	Black	Not connected
6	-	0 V

Table 3-4: Beacon Connection

Power Cable (RS232)



Figure 3-14: RS232 Connection

Scanner	Cable Pin	Wire Color	Function
1	5	Brown	GND
2	9	Blue	+12 V DC
3	-	-	-

Table 3-5: RS232 Connection

Scanner	Cable Pin	Wire Color	Function
4	-	-	-
5	-	-	-
6	2	Yellow	TXD (RS-232)
7	-	-	-
8	-	-	-
9	5	Red	SENS GND
10	4	Violet	SENSOR 1
11	-	-	-
12	3	Red/Blue	RXD (RS-232)
-	SHELL	BRAID SHIELD	CHASSIS

Table 3-5: RS232 Connection (Continued)

Product Detect



Figure 3-15: Product Detect Pin

Sensor	Cable Pin	Wire Color	Function
1	1	Red	+24 V
2	-	White	-
3	3	Black	0 V
4	4	Green	PNP OUTPUT
5	-	White	-
6	-	Blue	-
7	SHELL	DRAIN WIRE	CHASSIS

Table 3-6: Product Detect Connection