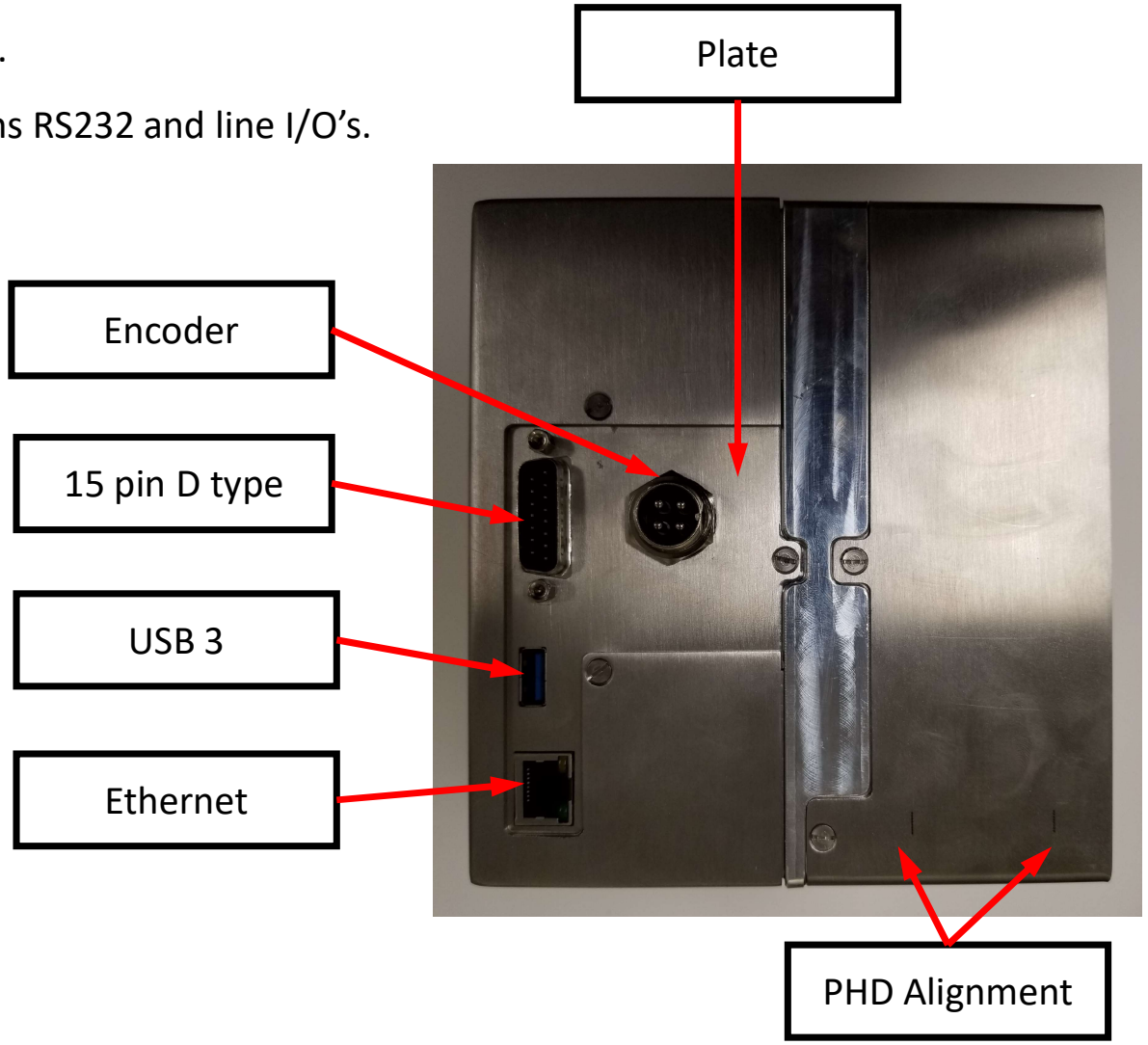
Printer Connections

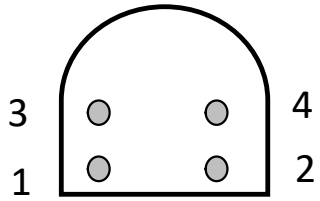
- Different plate is used when the encoder is not used.
- A 15 way D-type routes power to printer PCB, contains RS232 and line I/O's.
- USB 3 port is for the controller, Dongle or USB.
- Ethernet allows communication with printer and master/ slave connection.
- Continuous plate comes in the encoder kit.

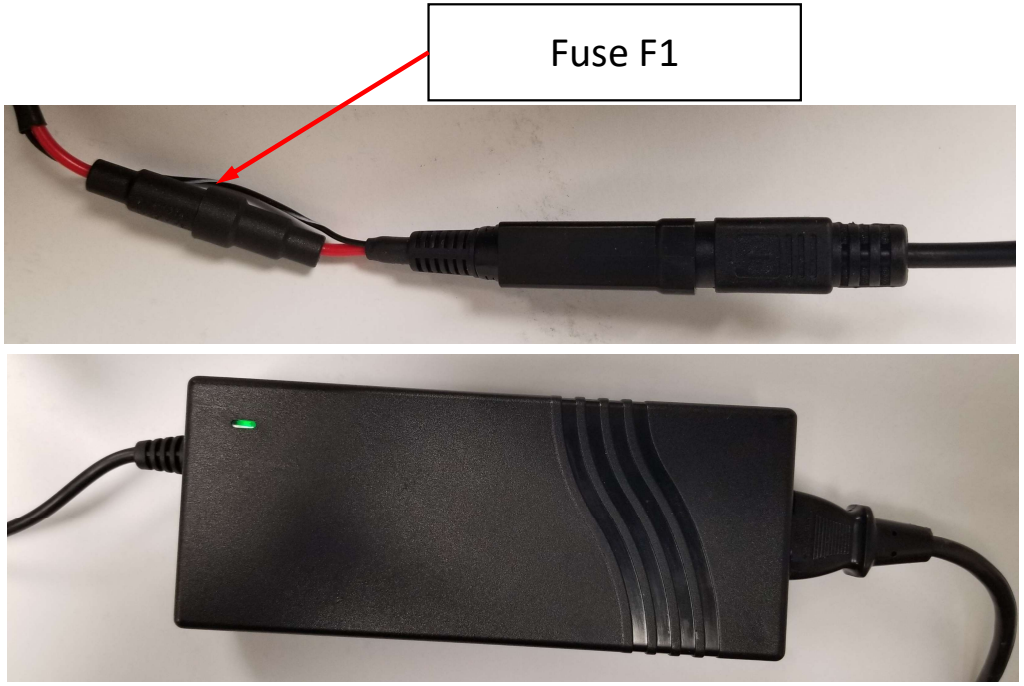


Power Supply

- The printer uses a simple ‘brick’ 24V PSU, and therefore VJ has the option to make available the print engine only for approved OEMs, who can supply power to the print engine based on our guidelines.
- 24 volt power supply
- 100-240 volt input
- Routes power through the I/O cable.
- Pins 10 and 12 are the 24 volts from the power supply.
- Fuse F1 FUSE Ceramic, 4A, 250VAC, 5X20mm, Slow blow, High Breaking capacity (250V ac @ 1500A).

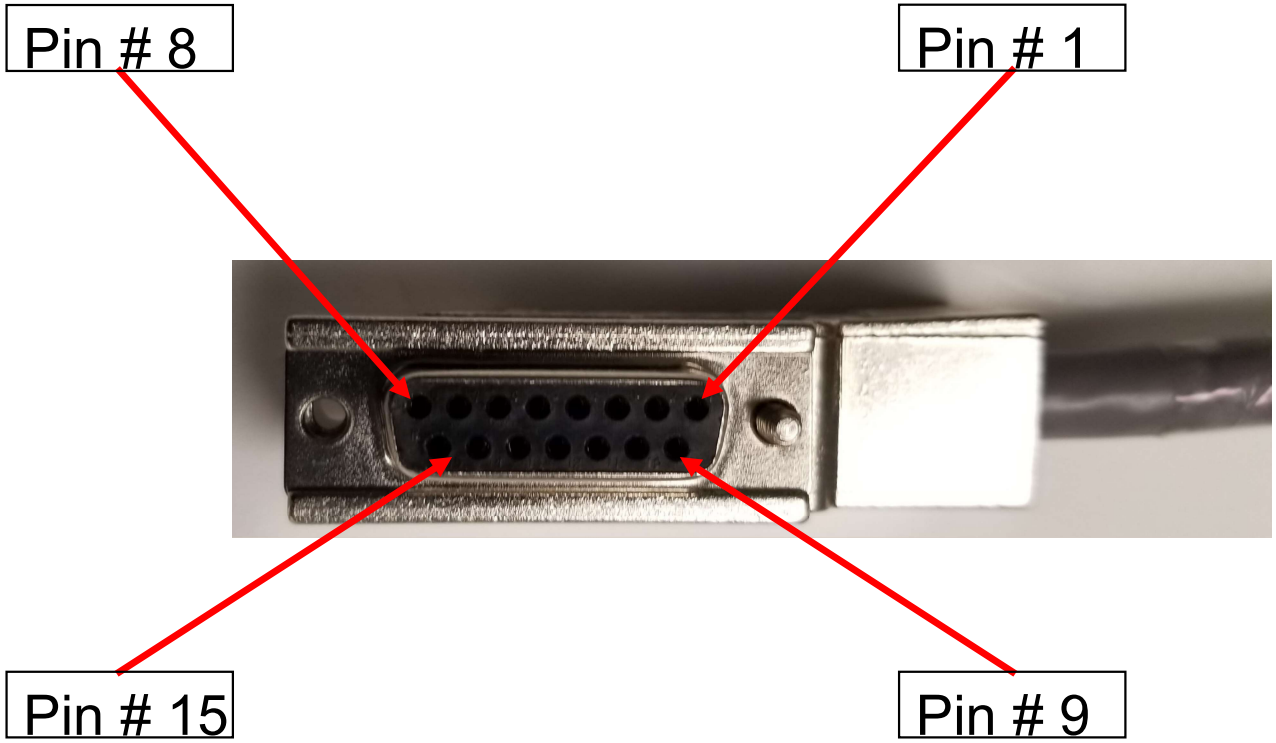
Pin#	
1	+ 24V
2	+24V
3	GND
4	GND





I/O Cable

- Contains the 24 power input.
- Contains the serial communication.
- Contains I/O cable
- 2 inputs
- 3 outputs
- Different color code from previous Dataflex.



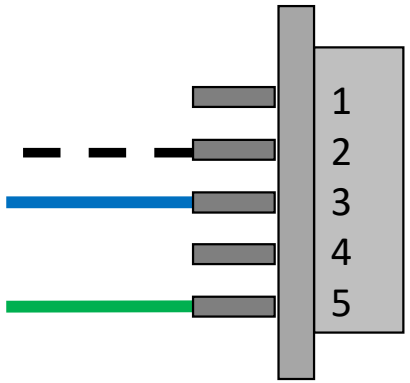
Serial connection

- Connects to a female DB9 connection.
- Black/White RX RS232 Input
- Blue TX RS322 Output
- Green ground

I/O Cable Side

Pin #5 Black/White = RX RS232 Input
Pin #13 Blue = TX RS232 Output

Pin #3 Green = Ground

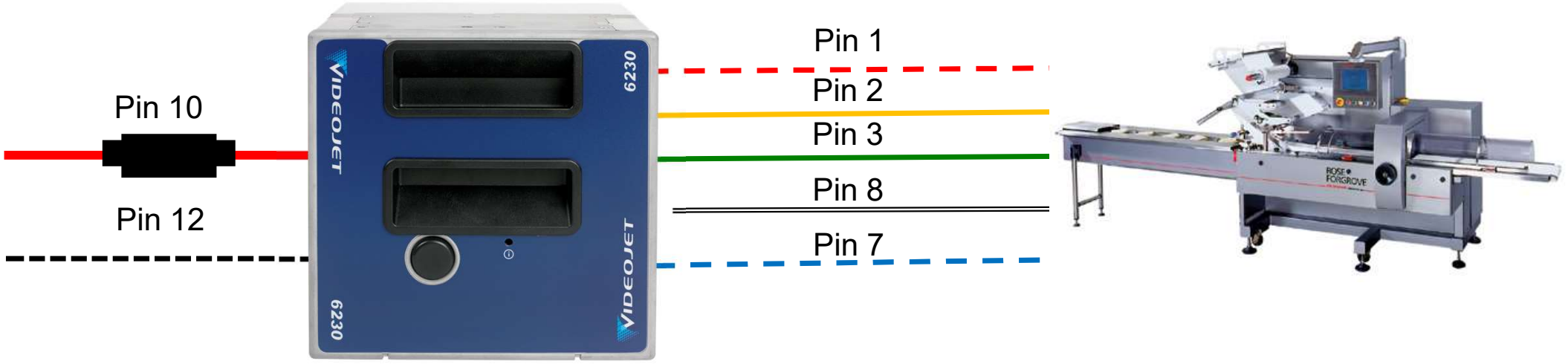


- View with wide part of “D” on top.
- Pin 2 RXD
- Pin 3 TXD
- Pin 5 GND

I/O Cable Pinout

Pin # in 15W D-Type	Wire Colour	Function	Available in Cable for Connection
1	RED/WHITE	+24V Out	Y
2	ORANGE	Print Input (External Input #1 PNP 24V)	Y
3	GREEN	0V Out	Y
4	BLUE/BLACK	Inhibit Print (External Input #2 PNP 24V)	Y
5	BLACK/WHITE	RX RS232 Input	Y
6	GREEN/WHITE	External Relay Output #1 N/C	Y
7	BLUE/WHITE	External Relay Output #1 Common	Y
8	WHITE	External Relay Output #1 N/O	Y
9	WHITE/BLACK	External Output #2 PNP 24V - Warning	Y
10	-	+24V From PSU	N
11	RED/BLACK	External Output #3 PNP 24V - Busy	Y
12	-	0V PSU / Earth In	N
13	BLUE	TX RS232 Output	Y
14	ORANGE/BLACK	ENCB_IN	Y
15	GREEN/BLACK	ENCA_IN	Y

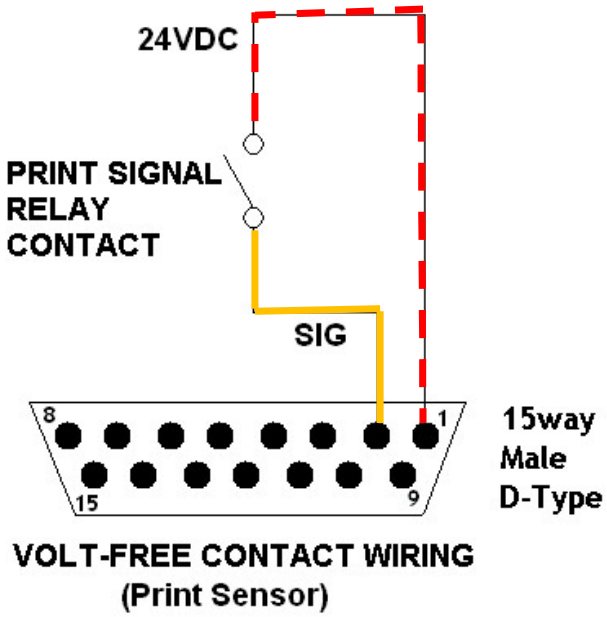
Install Wiring



- Pins 1&2 0 volt print signal.
- Pin 1,2&3 photo cell.
- Pins 7&8 fault output to OEM.
- Pins 10&12 are 24 volt power.
- I/O’s are configured in CLARiTY Configuration Manager.

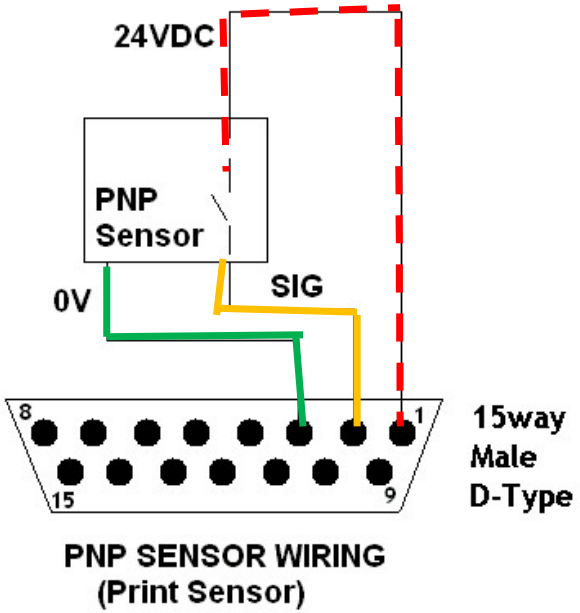
Dry Contact Wiring

- All I\O connections via 15 way D type on printer.
- Signal can come from PLC or a isolated relay.
- Print Signal
  - Volt free
  - PNP



Photocell Wiring

- PNP print signal
- Signal can come from a photo cell or a label sensor.

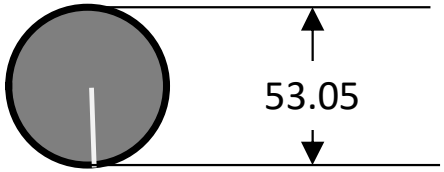


PNP SENSOR WIRING
(Print Sensor)

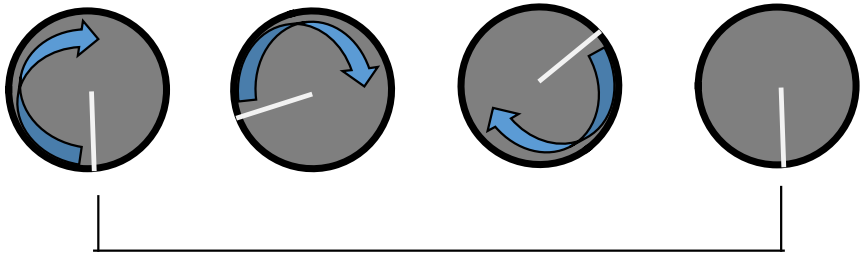
Encoder

- Encoder mode: Quadrature.
- Encoder number of lines: 3600.
- Encoder wheel diameter: 53.05mm.
- Encoder source: 24 volt push pull inputs.
- Connects to the Printer or I/O cable.
- The 6230 does not print in fixed speed.
- Tools | Diagnostics | Printhead | Encoder.
- The 6230 does not print if the encoder is turning backwards.
- The O-ring is an orderable part.
- Shield braid runs through connector housing and clamped under the cable clamp to ensure continuity between shell of SKT1 and metal casing of ENC1.

Pulses per mm



53.05 = Diameter



Diameter X Л (Pi) = Distance per rotation

$$D \quad X \; Л \; = 167mm$$

500/167=3 pulses per mm
3600/167=21 pulses per mm

Conclusion 3600 pulse encoder has 7 times the resolution of the old encoder.

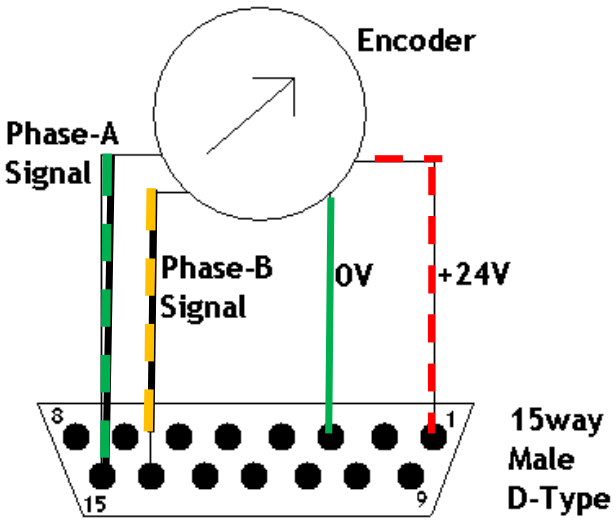
Encoder Wiring Table

- Shield braid runs through connector housing and clamped under the cable clamp to ensure continuity between shell of SKT1 and metal casing of ENC1.
- SKT1 is the 4 Pin Cable mounted socket connector.
- ENC1 is the 3600 pulse per revolution (ppr) Incremental Encoder.
- If Tools | Diagnostics | Printhead | Encoder indicates backward, relocated the encoder or switch wires ENC A and ENC B.

ENC1	SKT1	Wire color	Function
1	1	Red	+24V ENC
2	2	Black	0V ENC
3	3	White	ENC A
4	4	Green	ENC B
-	Clamp	Braid shield	Chassis

Encoder Wiring

- Encoder Connections
- Single or Two channel
- Two channel gives directional intelligence



ENCODER WIRING