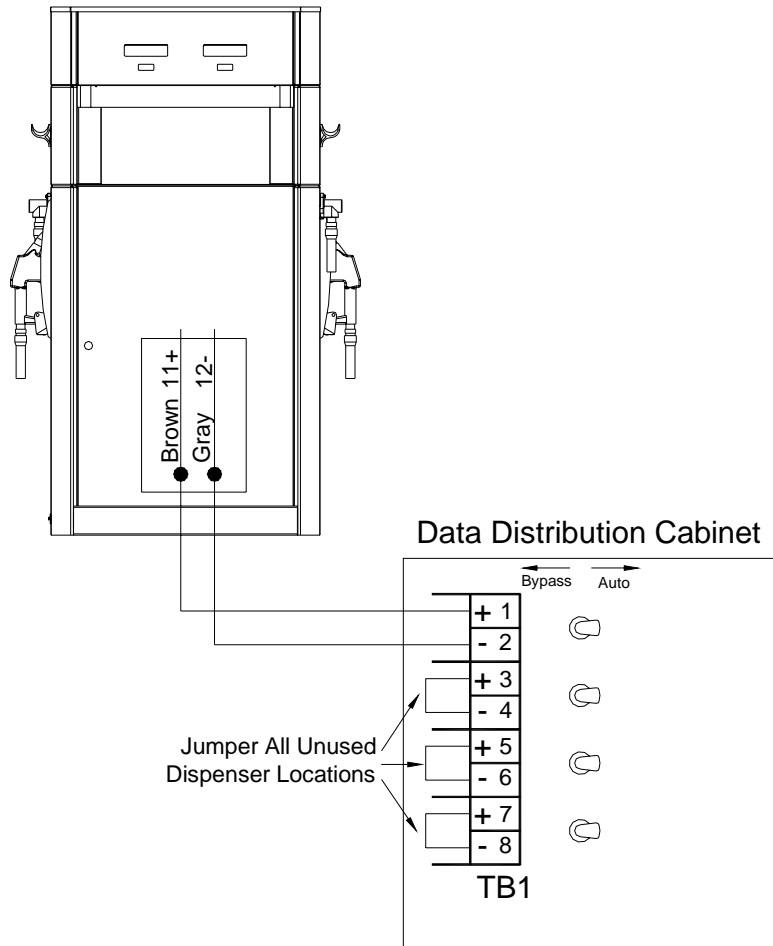


Appendix D

Current Loop Interface

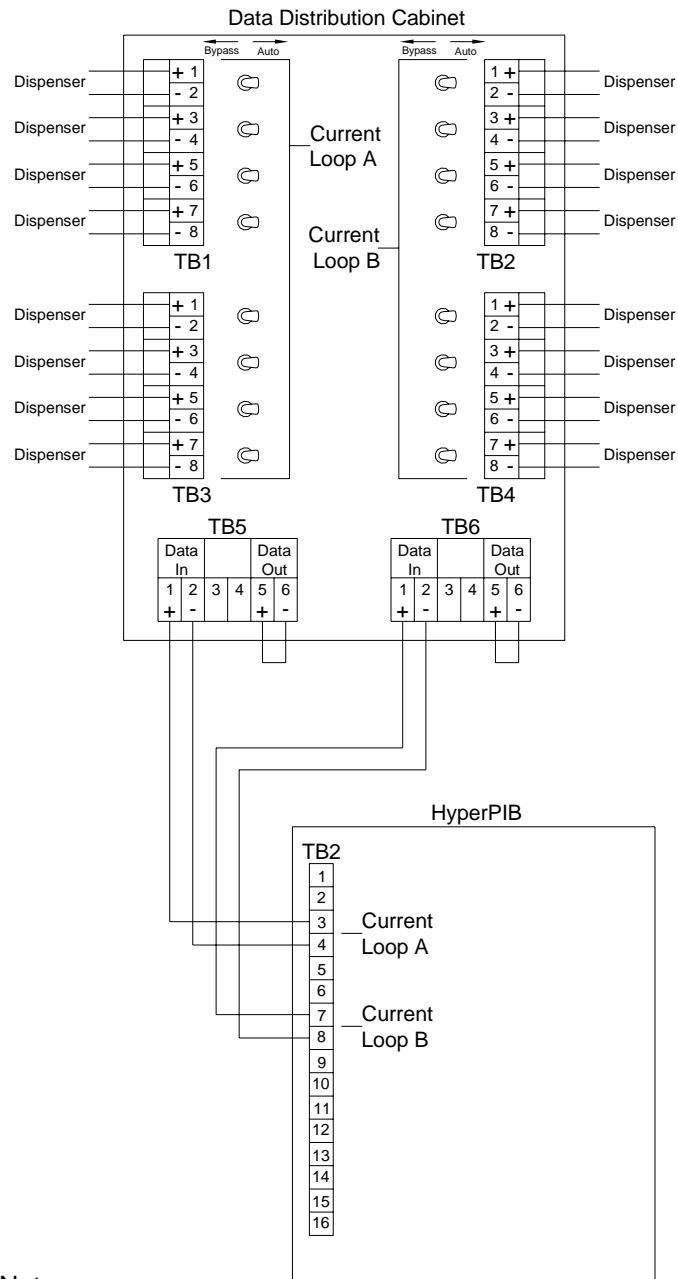
D.1 Point-to-Point Dispenser to Data Distribution Cabinet Wiring



Notes:

1. All equipment to be installed in accordance with all applicable local, state, and federal codes, including, but not limited to, the National Electrical Code (NFPA 70), NFPA 30, and the Automotive and Marine Service Station Code (NFPA 30A).
2. For wiring connections, use wires rated at least 90°C, 600V, Gas and Oil Resistant, 18 AWG. The use of twisted pair cables can enhance communication for longer distances.
3. For full details of Wayne control systems interconnections see the manual provided with the system.

D.2 Wiring Using One Data Distribution Cabinet (Up to 16 dispensers)



TB5 or TB6

Data In			Data Out		
1	2	3	4	5	6
+	-			+	-

Jumper positions 4 & 5 for 4 or less dispensers per loop OR cumulative distances of less than 150 feet per loop.

TB5 or TB6

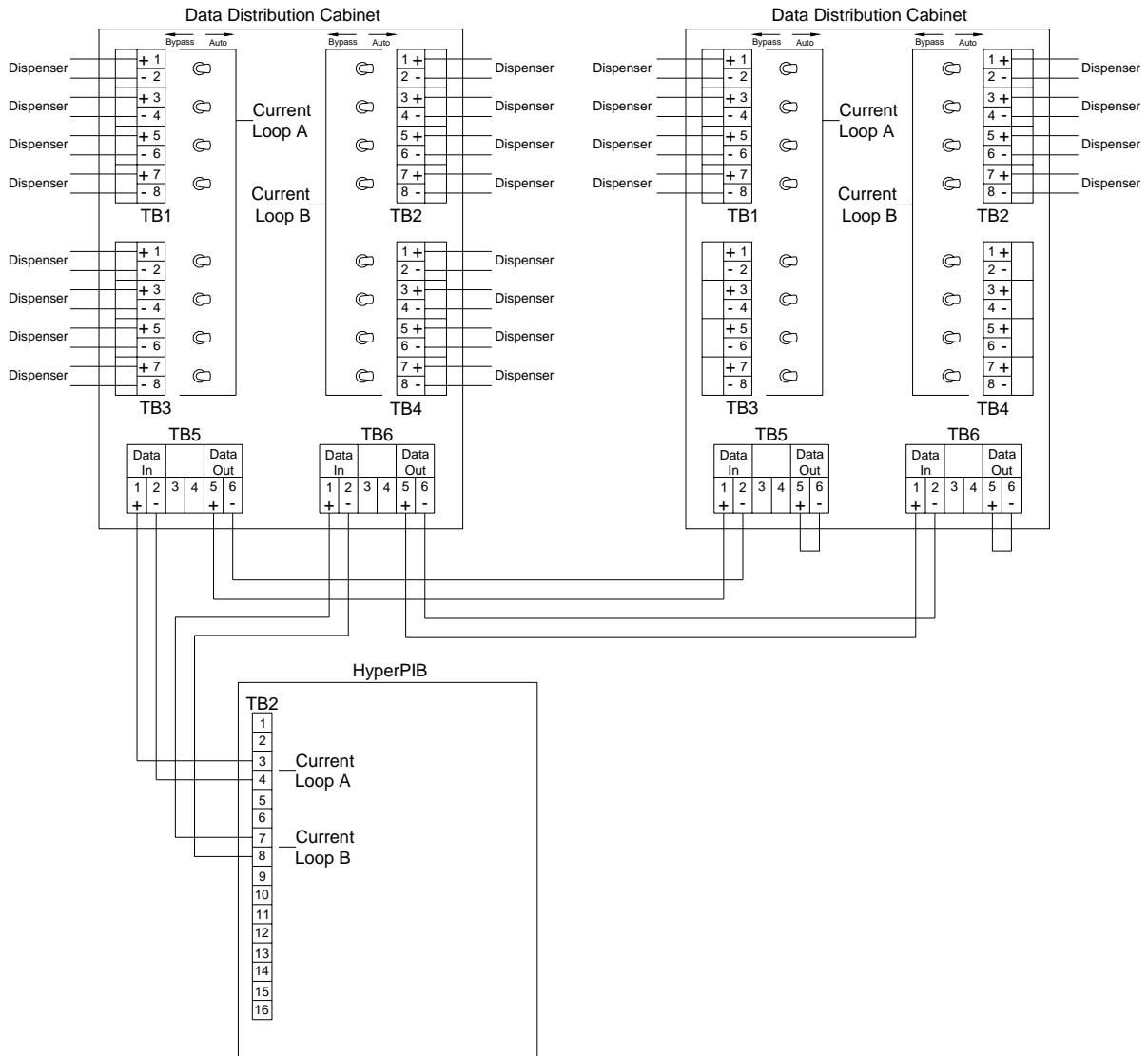
Data In			Data Out		
1	2	3	4	5	6
+	-			+	-

Jumper positions 5 & 6 for 5 or more dispensers per loop OR cumulative distances of 150 feet or greater per loop.

Notes:

- Two Current Loops are provided for communication to the dispensers from the HyperPIB. Evenly distribute the dispenser loads across both loops in the Data Distribution Cabinet.
- All unused dispenser positions in the Date Distribution Cabinet should be jumpered in the cabinet with the switch placed in the "Auto" position. This practice reduces the overall load on the loop.
- Each loop in this configuration is limited to 8 dispensers and a total wire length of 1800 feet. This length of 1800 feet includes the distance between the HyperPIB and the Data Distribution Cabinet as well as the distance between each dispenser and the Data Distribution Cabinet.
- See the TB5/TB6 jumper requirements for each loop according to the drawing above. TB5 is associated with Loop A and TB6 is associated with Loop B.

D.3 Wiring Using Two Data Distribution Cabinets (Up to 24 dispensers)



Notes:

1. Two Current Loops are provided for communication to the dispensers from the HyperPIB. Evenly distribute the dispenser loads across both loops in the Data Distribution Cabinets.
2. All unused dispenser positions in the Data Distribution Cabinets should be jumpered in the cabinet with the switch placed in the "Auto" position. This practice reduces the overall load on the loop.
3. Each loop in this configuration is limited to 12 dispensers and a total wire length of 1800 feet. This length of 1800 feet includes the distance between the HyperPIB and the Data Distribution Cabinet, the distance between the first and second Data Distribution Cabinet, and the distance between each dispenser and the Data Distribution Cabinets.