(IR) **Assembly Solutions**
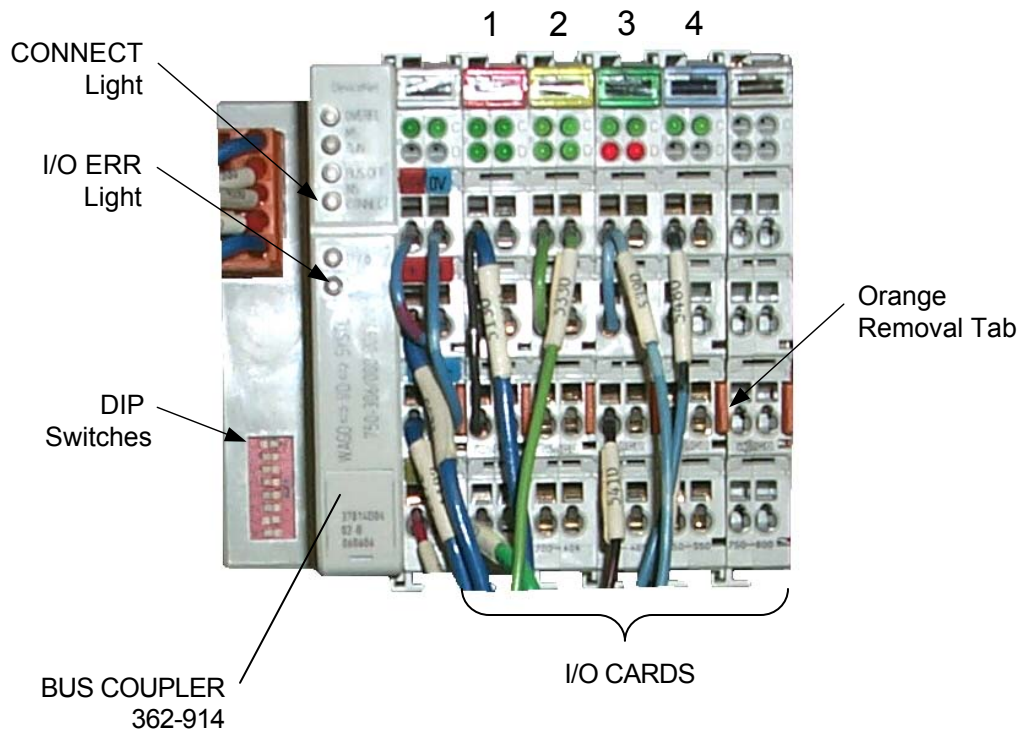
Application Services
(866) 284-5509

All Johnstone systems have at least two (2) DeviceNet I/O blocks. One is inside the main panel and it controls the Temperature Conditioner, the other is at the robot and it controls the Dispense Head.

A second dispenser or pump monitoring station will also have a DeviceNet I/O block. Example: A dual system with pump monitoring will have five (5) blocks, one at the Temperature conditioner, one for each Dispense Head, and one for each Pump Station.

CONNECT Light
I/O ERR Light
DIP Switches
BUS COUPLER 362-914
Orange Removal Tab
I/O CARDS
1 2 3 4

Problem:
A)   The system can not see one of the I/O blocks. When you look at the I/O block, the "CONNECT" light is flashing, but lights are green.

Root Cause:
The block is powered up correctly, but it is not talking to the controller.
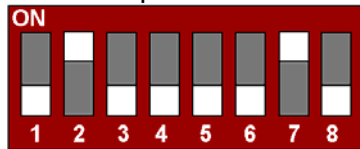
#1 The settings could be wrong.
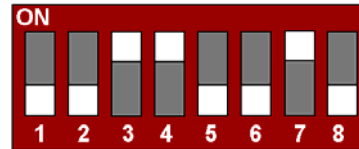
#2 The electrical connection could be broken.

Solution #1:
Check the DIP Switches on the I/O blocks to make sure they are set correctly:
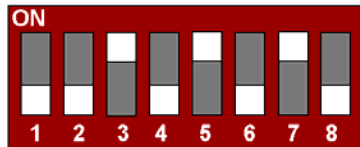
Main Panel with St. Clair Single
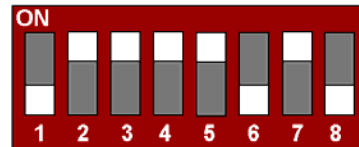or No Temperature Conditioner

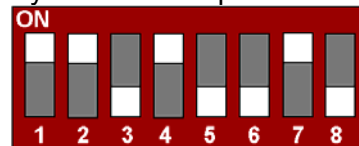Main Panel with St. Clair Dual

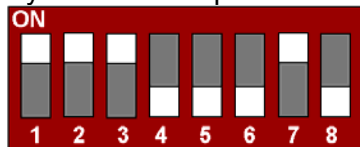Main Panel with Precise Single

Main Panel with Precise Dual

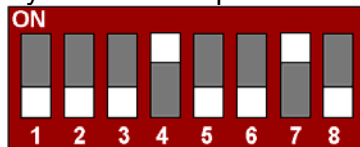System 1 1K Dispense J-Box

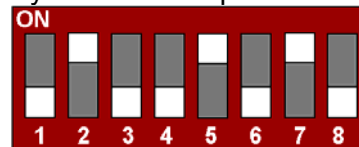System 2 1K Dispense J-Box

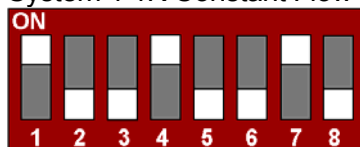System 1 2K Dispense J-Box

System 2 2K Dispense J-Box

System 1 1R Dispense J-Box
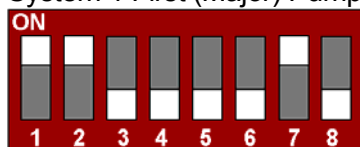
System 2 1R Dispense J-Box

System 1 1K Constant Flow Dispense J-Box

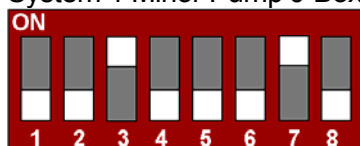System 2 1K Constant Flow Dispense J-Box

System 1 First (Major) Pump J-Box

System 2 First (Major) Pump J-Box
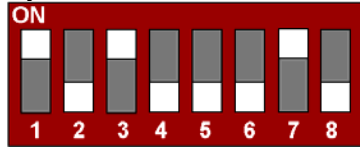
System 1 Minor Pump J-Box
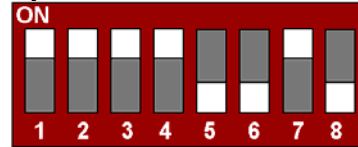
System 2 Minor Pump J-Box

Accessories:

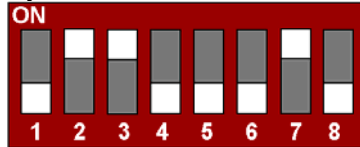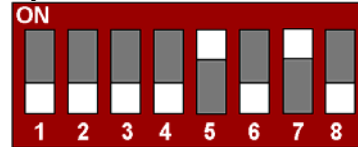System 1 Remote Switch

ON
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

System 1 Remote Switch

ON
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

System 1 Extra Gun Box

ON
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

System 1 Extra Gun Box

ON
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

Solution #2:
Check the physical cables, tees, and terminators on the system:

Each DeviceNet network must have a cable running to each device and a Terminator at both ends of the network. The devices can be in any order.

Terminator — Cable — Tee

| Node 1 | Node 2 | Node 3 | Node 0 |
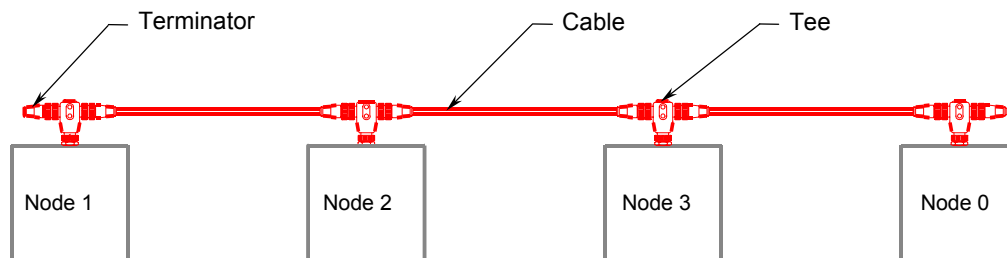
Verify that the Cables are all attached. Replace Tees, Terminators, and Cables if necessary.

CABLE
362-929-15

TEE
363-274

TERMINATOR
362-904

JUNCTION BOX

CONNECT Light

I/O ERR Light

DIP Switches

BUS COUPLER 362-914

Orange Removal Tab

I/O CARDS

1   2   3   4
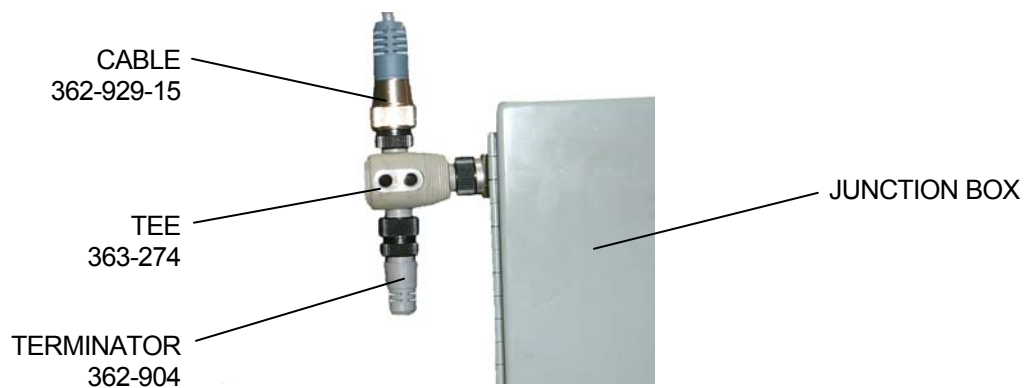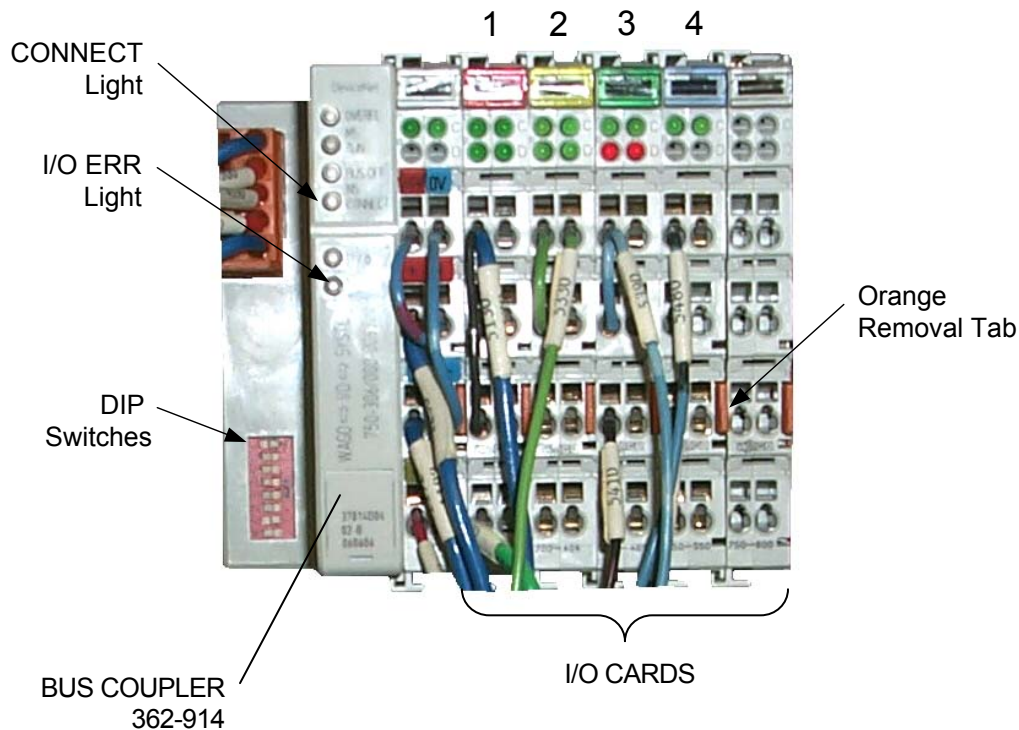
Problem:

B)   The system can not communicate with one or more of the devices. When you look at the I/O block, the red "ERROR" light is on.

Root Cause:

One of the modules is bad and must be replaced.

#1 The Bus Coupler is bad.

#2 One of the I/O Modules is bad.

Solution #1:

If the Bus Coupler is bad, the red lights will flash at the same rate or stay ON constantly. Replace the Bus Coupler

Solution #2:

If an I/O card is bad, the red light will flash very fast, then flash four times slowly, pause, then flash a number of times more. The number of times it flashes after the pause tells which is the last good I/O card.

Example:

Fast flashing
Flash – Flash – Flash – Flash
Pause
Flash – Flash – Flash

This means that I/O card number 3 is the last good one, replace I/O card number 4.