**PANEL CONTROL RIO**

**1. Description  
Handles the remote I/O connections for various control functions within the system.**

**2. Functions**

* **Manages inputs/outputs to control subsystems (e.g., diverters, motors, sensors).**
* **Sends data to other control panels.**

**3. I/O and Signals**

| **Signal Name** | **Type** | **Description** | **Panel** |
| --- | --- | --- | --- |
| **RIO\_INPUT\_1** | **DI** | **Input signal from sensor** | **PANEL\_CONTROL\_RIO** |
| **RIO\_OUTPUT\_1** | **DO** | **Output signal to actuator** | **PANEL\_CONTROL\_RIO** |
| **RIO\_FEEDBACK\_1** | **DI** | **Status feedback from I/O** | **PANEL\_CONTROL\_RIO** |

**4. Interlocks & Safety**

* **Stops outputs if corresponding inputs fail.**

**5. Dependencies**

* **Communicates with other control panels (e.g., PANEL\_CONTROL\_SORTER, PANEL\_VFD\_APF35).**

**6. Alarms**

| **Alarm ID** | **Condition** | **Message** |
| --- | --- | --- |
| **A\_RIO\_01** | **I/O signal failure** | **"RIO Fault"** |

**7. HMI / Operator Interaction**

* **I/O status displayed for operator review.**
* **Ability to reset or test I/O points.**