The 1582-42L provides AUTO or Manual latched relay switching between CH1 and CH2 data signals. Alarm conditions on CH1 and CH2 are either a contact closure to ground or an open (selectable). Switching logic can be selected as follows:

1. **CH1 Prime Mode** - Switches from CH1 to the CH2 only if CH1 alarms and CH2 is good. Switches back when CH1 no longer in alarm or both CH1 and CH2 are bad.
2. **Latch to CH2 Mode** - Latches to CH2 if CH1 alarms and CH2 is good. Return to CH1 only when Manual Reset switch is pushed or Remote Reset pin is grounded and if no alarm on CH1.
3. **Minimum AUTO switching, Initial Channel Select (ICS) Mode** - Switch stays on channel last selected by Manual or Remote selection after return to AUTO. AUTO switching occurs only if current channel alarms and other channel is clear.

On power loss and when power is applied (as alarms at power up dictate), the selected channel remains on. The Manual Select switch and (when in AUTO) contact closures to Remote Select pins, select CH1 or CH2 independent of alarms. LEDs indicate alarm and switch conditions for CH1 and CH2 and REMOTE or MANUAL operation. Redundant power supplies provided.

---

**EQUIPMENT SPECIFICATIONS**

**Data Characteristics**
- Input/Output: RS422
- Data rate: 15 Mbps max
- Pins Switched: 1, 2, 4, 6, 7, 9

**Switch Characteristics**
- Type: Latching Relay
- Isolation: >40 dB
- Switch time: ≤10 milliseconds
- Contact resist.: ≤10Ω, <1Ω typ
- Configuration: DPDT

**Controls and Indicators**
- Manual Select: Manually selects CH1, CH2
- SWITCH RESET: Resets switch to CH1 if good & switch in latch mode. Also resets REMOTE
- HISTORY RESET: Resets alarm history (prior occurrence of alarms now cleared) LEDs ONLY
- LEDS: CH1, CH2 ON-LINE, ALARM; ALARM HISTORY; MANUAL; REMOTE; POWER

**Other**
- Alarm Connector: Barrier Strip
- Data Connector: DB9 (female)
- Mechanical: 19 inch standard chassis 1.75"high X 11.5" deep
- Power: 100-240 ±10% VAC, 47-63 Hz, 20 watts; Redundant power supplies

*+10°C to +40°C; Specifications subject to change without notice