

PREEMPTION ADAPTER (850-275) INSTALLATION INSTRUCTIONS

The Preemption Adapter is designed to provide an interface between the Polara CCU EV inputs on cable #3 and the preemption signals found inside a traffic signal cabinet. It is compatible with any traffic signal system where the following connections are available: Logic Ground, +12 to +24 VDC, and one to four preemption signals which switch to Logic Ground when active. The Preemption Adapter is a high impedance device that monitors activity of the preemption signals and has a trip point at about 4.75 volts DC. Any preemption signal that falls below the trip point will trigger the preemption message. The preemption signal should switch to logic ground at the beginning of preemption and remain there to the end of preemption without pulsing. This will result in a single occurrence of the preemption message.

Installation consists of making from five to eight wire connections depending on the number of preemption signals. The connections are listed here.

| | |
|--------|---|
| LGND | - to Logic Ground |
| +24 | - to +12 to +24 VDC relative to Logic Ground |
| EV1 | - to CCU cable #3 yellow wire |
| EV Com | -to CCU cable #3 gray wire |
| P1 | - to preemption signal |
| P2 | - to preemption signal – leave open if not used |
| P3 | - to preemption signal – leave open if not used |
| P4 | - to preemption signal – leave open if not used |

In a CalTrans 332 cabinet, Logic Ground would typically be at terminal I15-2. +24 VDC would be at terminal I15-1. The preemption signals would typically be located at terminals F and W of the two slots on the rear of the input file where the preemption detector is located.

Product Specifications:

| <u>Parameter</u> | <u>Value</u> |
|-------------------------|--------------------------|
| Supply Voltage | 28.0 Vdc Maximum |
| Supply Voltage | 10.8 Vdc Minimum |
| EV1/EV Com Current | 5 mA Maximum |
| Threshold Voltage | 4.75 Vdc Typical |
| Box Dimensions | 3.2x1.6x0.8 inch Maximum |
| Cable Length | 24 inch Typical |