2018KCLip

Signal monitor unit for Caltrans cabinets

CALTRANS

Enhanced monitoring to increase cabinet fault coverage, providing additional assurance that equipment malfunctions will be detected and diagnosed properly.

Features

- 18 channels
- Program with interchangeable Datakey™
- MonitorKey® programming tool
- Setup Wizard

Highlights

Simple setup: Complete configuration by answering just 3 guided questions.

Centralized programming: Plug-and-play data keys eliminate diode cards and DIP switches while restricting configuration changes to approved tools and users.

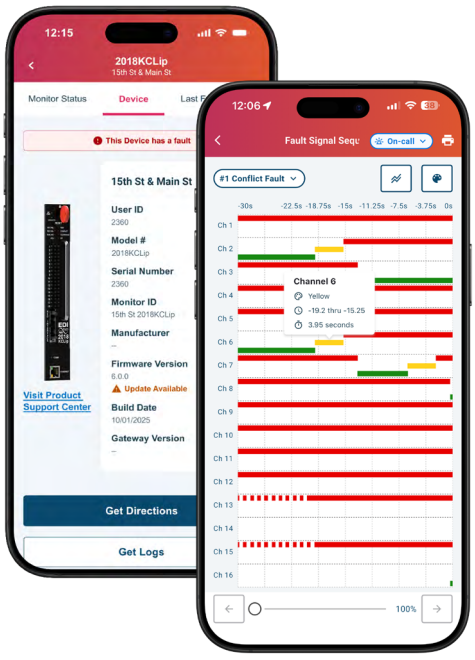
Smarter flash control: Configure how long the monitor waits before bringing the intersection out of flash, accommodating controller startup and power restoration timing.

What is SYO™?

SYO is an intelligent maintenance and operations ecosystem that provides supervisors and technicians with near real-time visibility across their EDI signal monitors.

Improve uptime with faster detection and response, and reduced field visits by diagnosing problems before dispatching technicians. Learn more: synapse-its.com/SYO

- Text and email alerts sent directly to you, with on-call and vacation options.
- Work from the field or office with SYO App (Apple and Android™) or SYO Web.
- See all your devices on a map with live status view or drill down for more critical device or fault details.



meets MUTCD standards

BABA COMPLIANT Oct. 1, 2026

ISO 9001 CERTIFIED

2 YEAR LIMITED WARRANTY

editraffic.com sales@editraffic.com **1-480-968-6407**

Powered by Synapse ITS

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Caltrans specifications

The 2018KCLip meets all requirements of the Caltrans “TSCE Specifications 1/89” and Caltrans Transportation Electrical Equipment Specifications (TEES) of March 2009.

Enhanced 210 monitoring functions

Basic fault coverage includes Conflict, 24Vdc, and CU Watchdog Monitoring.

Red monitoring	Senses the absence of signals on a channel.
Dual indication monitoring	Detects simultaneous active signals on a channel.
Clearance monitoring	Ensures sequencing of signals with a proper minimum yellow clearance interval.
AC line monitoring	Detects and responds to low AC Line voltages as well as interruptions with a minimum flash interval.

Logs

Event logging	Maintains a 100 record nonvolatile event log which contains records of fault events showing the complete intersection status as well as AC line events, configuration changes, monitor resets, cabinet temperature and true RMS voltages. A real time clock time stamps each log event with time and date.
Signal sequence history display	Five signal sequence history logs stored in nonvolatile memory each graphically display 30 seconds of signal status prior to each fault event. The resulting display eases diagnosing of intermittent and transient faults by viewing the exact signal states that the monitor sensed.

Red yellow green full intersection display

The full intersection display uses red, yellow, and green LEDs to show active colors of all channel inputs simultaneously for real-time intersection status.

EDI RMS-Engine

A DSP coprocessor converts AC input measurements to true RMS voltages, virtually eliminating false sensing due to changes in frequency, phase, or sine wave distortion.

Recurrent pulse detection

The recurrent pulse (RP) Detection function supplements the Conflict, Dual Indication, and Red Fail algorithm. RP detection works in conjunction with the RMS-Engine to detect faults that are pulsing or intermittent in nature.

LEDguard®

This EDI innovative signal thresholding technique is used to increase the level of monitoring protection when using LED based signal heads.

Configuration monitor

Detects potentially unsafe programming changes and Red Interface cable problems.

Flashing Yellow Arrow PPLT

Three operational modes are built-in for support of the MUTCD Flashing Yellow Arrow PPLT operation depending on the number of load switches in the cabinet.

Communications to laptop PC or remote traffic management center

Ethernet port provides access by a local PC or remote TMC running ECcom Windows based software or SYO cloud based software for status, event log review, and archival.

Datakey configuration memory

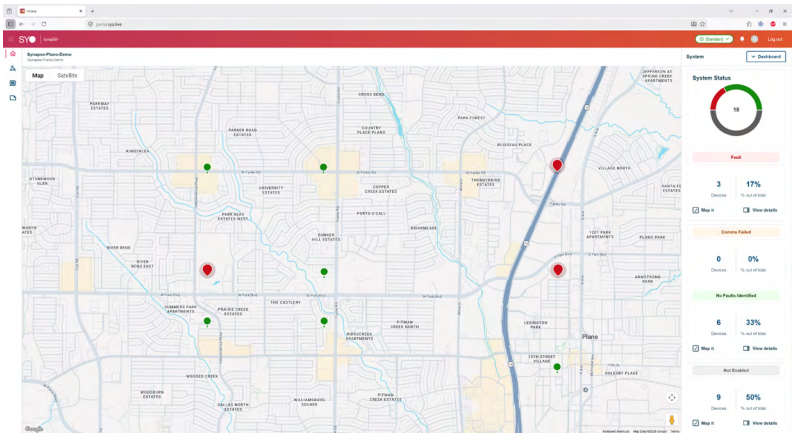
Complete 2018KCLip programming is provided by an interchangeable Datakey™ nonvolatile memory device. This rugged key stores all 2018KCLip configuration parameters and completely eliminates monitor programming using jumpers, diodes, or DIP switches. Ethernet network parameters are also included (firmware version xx56 or greater).

Setup Wizard

Use the MonitorKey® Setup Wizard to automatically and accurately configure the enhanced settings of the 2018KCL by answering a short series of questions regarding intersection geometry and operation.

SYO ecosystem

Interfaces	SYO App (Apple, Android), SYO Web. Contact us for SYO API integration. Download on the App Store GET IT ON Google Play
User management	Role-based access and audit logs. Optional single-sign-on (SSO) with company email. Secure login with user authentication. SYO App works with a mobile phone’s biometrics.
Device monitoring & alerts	Centralized monitor dashboard, refreshed every half second (communications, health, other data). SMS text and email alerts (faults) with on-call + vacation options. Data aggregation and storage.
Live device status	See channel status, channel voltage and more.
Remote access to logs	Fault Signal Sequence, Monitor Reset, AC Line, Previous Fail, Configuration and more.
Device configuration	View and share most recent configuration changes for each monitor.
Security	Zero-trust architecture with encryption from agency network to hosted environment.



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