



2010ECL-FYA

Enhanced 2010ECL Signal Monitor For Protected/Permissive Signal Displays Utilizing Flashing Yellow Arrows

The 2010ECL-FYA series signal monitor provides the highest level of fault monitoring for agencies utilizing the four section FYA movement outlined by the NCHRP Research Project 3-54 on Protective/Permissive signal displays with Flashing Yellow Arrows.

The 2010ECL-FYA is fully compatible with the requirements of the 170, 179, and 2070 Controller Units.

For over 25 years, EDI continues to set the industry standard and provide traffic signal professionals with reliable, high quality mission critical component products that improve the performance and lifecycle of traffic control systems.

2010ECL-FYA FEATURES

Enhanced 210 Monitoring Functions:

The 2010ECL-FYA meets all requirements of the Caltrans "TSCE Specifications 1/89". Basic fault coverage includes Conflict, 24Vdc, and CU Watchdog monitoring. Red Monitoring senses the absence of signals on a channel, and requires the output file to be wired for Red signals. Dual Indication Monitoring detects simultaneous active signals on a channel. Sequence 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.

Flashing Yellow Arrow:

The 2010ECL-FYA unit configures channels 1, 3, 5, and 7 to monitor the Protected Green Arrow phases, and channels 9, 10, 11, and 12 to monitor the associated Red Arrow, Yellow Arrow, and Flashing Yellow Arrow Overlap phases. Channel pairs are enabled for the FYA monitoring function by Option DIP switches. If the FYA function is not enabled for a channel pair, the channels operate normally. Conflict, Dual Indication, Red Fail, and Sequence monitoring are provided for the FYA enabled channel pairs as a four input logical channel.

Event Logging:

The 2010ECL-FYA monitor 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.

RYG 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.

Communications to Controller Unit or PC:

An EIA-232 serial link provides access by a computer running EDI ECom™ Windows based software for status, event log review, and archival. The 2010ECL-FYA is also compatible with Siemens SE-PAC and BI Tran Systems 233 software to update the Controller Unit with monitor status and automatically synchronize the 2010ECL-FYA clock and calendar.

Signal Sequence History Display:

The Signal Sequence History Log stored in nonvolatile memory graphically displays up to 30 seconds of signal status prior to the fault trigger event with 50ms resolution to clarify diagnosing of intermittent and transient faults.

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EBERLE DESIGN INC.

3819 East La Salle Street
Phoenix, AZ 85040 USA
www.EDITraffic.com

Tel (480) 968-6407
Fax (602) 437-1996

