

ASC/3-2070 Controller Software



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About ASC/3-2070 Software

The ASC/3-2070 software provides an updated design that allows it to serve as the traffic control platform for present and future traffic management environments. The software is compliant with NEMA TS2 and National Transportation Communications for ITS Protocols (NTCIP) standards, and is compatible with all existing Econolite systems.

The ASC/3-2070 software was designed using the latest software development technologies, which offer the user a controller software package that is affordable, reliable, flexible, and is compatible with any pre-qualified 2070 controller (2009 Transportation Electrical Equipment Specifications (TEES)).

All software for the ASC/3-2070 is stored in flash memory. This allows for quick and easy software updates in the field without changing hardware. Once updated, the controller only needs to be power cycled to allow the new firmware to take control.

At A Glance

- ▶ Designed, developed, and tested in an ISO-certified environment
- ▶ Supports the model 2070 open architecture and OS-9 operating system. Also available for operation on Linux operating system
- ▶ Exceeds NEMA TS2 functional requirements
- ▶ Software support for Centrac[®], icons[®], Aries[®], and any NTCIP 1202, level-2 compliant pre-qualified applications
- ▶ Software and upgrades can be easily downloaded via a laptop



Control features

- 16 phases with 8 configurable concurrent groups in 4 timing rings
- All standard NEMA TS1, TS2, and NTCIP functions
- 16 timed vehicle overlaps
- 16 pedestrian phases that can be configured as pedestrian overlaps
- Exclusive pedestrian operation
- Soft vehicle recall
- Conditional service
- Dynamic max operation
- Bike minimum green, second walk and pedestrian clear times, in addition to a walk and pedestrian clearance maximum
- Advanced walk
- Pedestrian clear protect
- Red maximum
- Vehicle extension 2
- Guaranteed minimum green, walk, ped clear, yellow, red, red revert, and overlap green
- Redundant monitoring of the Malfunction Management Unit (MMU) status to enhance intersection monitoring
- 4 timing plans selectable on Time-of-Day (TOD) or coordination plan basis or for one cycle following preemption
- Powerful logic processor

Coordinator features

- 120 coordination patterns, each with its own cycle, offsets, and split plan selection
- 120 split plans, each with its own coordinated phases, vehicle, and pedestrian recall and phase omits
- Offset and split entries displayed in percent or seconds
- Automatic permissive periods
- Fixed or floating force-off
- Crossing arterial coordination
- Quick-sync feature

Basic Specifications

► Preemptor features

- ◉ 10 preemption sequences. Each may be configured as priority, first-come-first-serve, or bus preemption operation
- ◉ ECPI dual-circuit preempt interlock to provide added monitoring safety

► Logging features

- ◉ Separate buffers for detector activity, detector failures, controller events, and MMU events
- ◉ Logged data can be viewed on front panel, retrieved via RS-232 terminal port, or transferred via telemetry to a traffic management center
- ◉ Option available to operate with the Linux operating system on a 2070-1C CPU

Detector features

- 64 vehicle detectors
- 16 system or speed detectors
- Unique detector types and operations
- Individually assignable to phase and functions
- Lock/non-lock function by detector
- 4 detector plans
- 4 detector diagnostics plans
- Logging of volume and/or occupancy assignable by detector
- 4 pedestrian diagnostic plans

