ASC - 8000

The ASC-8000 Advanced System Controller is the culmination of extensive research into customer needs, system applications, and microprocessor based technology, combined with Econolite's 50 plus years of traffic control experience. This research has resulted in a system ready controller with a long list of advanced standard features combined with a programming method so easy to learn that most users can be entering data in less than five minutes with little or no instruction.

Keyboard programmable controllers have typically been difficult to program in part due to limited display capability and varying keyboard entry sequences. **Not so with the ASC-8000.**

Through the use of a multi-line alphanumeric Liquid Crystal Display the ASC-8000 provides easy to use menu driven programming, traffic engineering terminology prompts, simple cursor control of data entries, and an extensive status display capability.

Easy to use programming and advanced display capabilities are only two of many features of the ASC-8000. Features exceeding NEMA TS1-1983 standards, state of the art microprocessor design combined with a 5 year warranty put the ASC-8000 at the leading edge in traffic technology.

PRIORITY PREEMPTORS

Six priority preemptors allow multiple railroad or emergency vehicle preempt sequences. Priority preemption options include:

- Preemptors can be linked for complex or varied preemption sequences including multiple track clearance phases.
- Preemptors served on priority or nonpriority basis.
- Locking or non locking preemptor call.
- Hold options allow emergency lane green, all red, limited service, or flash conditions.
- Preemptor can override controller timing except during limited service in the Hold interval.
- Pedestrian indicators can be selected as ON, OFF or operational during preemption.
- Overlaps may be terminated at the beginning of preemption.
- Special timers: Duration of preemption sequence, Delay time between receipt of preemptor call and initialization of preemption, Inhibit time to stop normal phase sequencing.
- Easy selection of track clearance, hold and exit phases.
- Selection of calls to be placed after preemption.

BUS PREEMPTORS

Four bus preemptors allow preferential service for bus traffic. Programming options include:

- Reservice time control of repeated preemptor service.
- Delay time between receipt of bus preemptor call and start of preemption sequence.
- Inhibit time stops normal phase sequencing before preemption.
- Preemptor interval times for green, yellow, red, and pedestrian clearance.
- Selection of phases in effect during preemption.
- Direct interface to Opticom high and low priority preempt calls.
- Preemptor dynamic status display shows preemptor timing interval and status plus indications for calls, inhibit, delay and bus reserve timers.

```
PRIORITY      BUS          PMT   1
1 2 3 4 5 6 1 2 3 4 PHASE 4 T/C YEL  2.5
A D   C          R  PHASE 8 T/C YEL  2.5
                           DURATION 017
```

TELEMETRY

SYSTEM APPLICATIONS

Designed for system applications, the ASC-8000 can be a local or master controller operating in a hardwire interconnected system or part of a non-interconnected time-based system. When equipped with an optional Telemetry module, the ASC-8000 becomes a part of Econolite's Zone Monitor III system specifically designed to implement the many features of the ASC-8000. Time proven communication techniques are combined in the module with extensive status reporting for diagnostics and evaluation of system performance, providing the system owner with the most complete real-time displays capability in the industry.

SYSTEM COMMUNICATIONS

The Telemetry module operates as a transceiver providing communication between the ASC-8000 and KMC-10,000 master. Communication is achieved over voice grade four-wire type 3002 leased line or customer owned cable. Capabilities include: receipt of system commands; readback of intersection status including vehicle, pedestrian, and overlap indications; detector activity; event and alarm conditions; system detector data; and upload/download of entered data.

SPEED DETECTORS

Used for speed monitoring, two system detector pair inputs are used to generate counts for calculating speed based on speed detector distance. The speed data is then read back to the system master for reporting.

SYSTEM I/O INTERFACE

System inputs:
- Eight system detector inputs for volume and occupancy counts.
- Two user defined Alarm inputs allow reporting of special conditions or events.
- External address assignment provides permanently defined and enabled telemetry address.
- Conflict flash input alerts system of a conflict condition.
- Local flash input indicates that intersection has been set to flash.
- Door Open (MAINT REQD) indicates cabinet door open.

System Outputs:
- Four special function outputs provide control of auxiliary functions or equipment on a system wide basis.
- LEDs indicate receipt of carrier, valid data and transmission.

SPECIAL FEATURES

- Keyboard entry of telemetry address or external address assignment.
- Self-diagnostics test major functions and circuits. Test status is displayed.
- Dynamic status display shows system detector inputs, telemetry address, speed calculations, transmit and valid data indicators.