

Epic 140

The EPIC Series Controller is an Interval Oriented Pretimed Traffic Controller Unit with a full complement of operational, programming, and diagnostic capabilities. The EPIC Series Controller provides a Standard English Language Operator Interface improving efficiency and reducing errors. With internal historical data and full flexibility without the addition of hardware, the EPIC140 Series is a fully capable, user-friendly controller.

**Model EPIC
140M01 Shown**



Specifications

Power Requirements:

Voltage: 89 to 135 VAC

Frequency: 57 to 63 Hz

Consumption: 25 watts

Physical Dimensions:

9"H x 15"W x 8"D

(229mm H x 381mm W x 203mm)

Weight: 14 Pounds (30.8 kg)

Temperature Range:

-30°F to +165°F

(-34°C to +74°C)

Features

- Exceeds NEMA TS1-1989 environmental standards for traffic controllers
- Front panel multi-line alpha-numeric backlit display
- Fully prompted, menu driven programmability
- EEROM memory
- Optional EEPROM module
- Modular hardware design
- Internal diagnostics with automatic and operator initiated verification of:
 - a. Memory
 - b. Processor operators
 - c. Individual inputs and outputs
 - d. Keyboard
 - e. Display

Coordination

- 4 Dial/4 Split/3 Offset
- 48 Traffic Patterns
- 4 Offset correction modes
- Sync monitoring
- Manual control
- Dial/Split to Dial/Split Copy

Preemption

- 6 Preempt Sequences with:
 - a. Delay and Duration
 - b. Programmable Dwell
 - c. Programmable Exit
 - d. Programmable Cycling Dwell
- 6 Low Priority Routines

Time Base

- 10 week programs
- 99 Day programs
- 250 Event capacity
- Dimming (per output)
- Auxiliary outputs (3)
- Special function outputs (8) Per Unit

Features

- 4 Signal plans with 32 intervals
- 4 Detector Groups with detector stretch and delay
- Programmed (remote) flash
- Start-up flash or all red
- Programmed stop time reset
- Parameter print out
- Unit-to-unit transfer

Miscellaneous Features

- 8 System detector/coordination inputs
- Local traffic responsive pattern selector
- Detector diagnosis
- Detector assignments
- Speed report
- Monitor and log alarm/events
- Remote selected special functions
- Remote "manual" functions
- TBC on loss of communications
- Upload and download data communications
- SOLO operation with dial up



HARDWARE DESIGN

The EPIC Series Controller is designed for efficient operation and ease of maintenance. The chassis is made of metal and is designed for easy access to the boards for easy testing without disassembly. Inside the EPIC there are minimum components for maximum reliability. Maintenance and troubleshooting, when required, are enhanced utilizing the internal diagnostics program. All connectors are front panel mounted.

DISPLAYS

The EPIC backlit display provides true visibility into program entries, timers, and status of intersection operation. Related parameters are visible simultaneously making verification straightforward. The upper left corner identifies the display, and the lower line identifies cursor control and forward/backward menu selection.

PROGRAMMABILITY

All programming is via the front panel keyboard and LCD display. Programming is easy and error free due to the English Language Menus. Within a menu, each parameter may be viewed and a cursor movement to that parameter makes changes easy and error free.

MEMORY

To ensure the accuracy of traffic control parameters, even during power outages, EEPROM technology is used to retain all timing and control parameters. No batteries are required for retention of traffic parameters. Event Logging and the Time Base clock utilize RAM memory for those functions with battery support.

COORDINATION

Internal coordination is a highly flexible program operating within the EPIC. Sixteen (16) different timing programs may be selected (one for each dial/split combination) with three (3) offsets in each. Coordination settings and activity can be monitored and controlled. Included are multiple corrections and sync monitoring modes as well as input monitoring and easy to program menus to reduce the number of entries and the potential for errors.

TIME BASE COORDINATION

TBC contains automatic adjustment for leap year and daylight savings changes. It provides a minimum of 250 events each capable of requesting any of the 48 traffic control patterns, three (3) auxiliary events and dimming. TBC also provides the capability to program exception days and alternate weeks on a one-time basis over a year in advance. A resident diagnostic program is standard. In addition to the extensive displays to aid in intersection setup, monitoring, and operation, the resident diagnostic

program enhances the maintenance and troubleshooting of the controller. Many of the diagnostic routines execute automatically and continually verifying unit integrity. Diagnostic analysis is displayed and logged in English.

DIAGNOSTICS

A resident diagnostic program is standard. In addition to the extensive displays to aid in intersection setup, monitoring, and operation, the resident diagnostic program enhances the maintenance and troubleshooting of the controller. Many of the diagnostic routines execute automatically and continually verify unit integrity. Diagnostic analysis is displayed and logged in English.

Automatic diagnostics begin at power up and continue as long as the unit is operating. Power up diagnostics include ROM, RAM and Processor checks. Failures will result in the unit not enabling the Voltage Monitor output while the display shows messages such as "ERROR: RAM TEST."

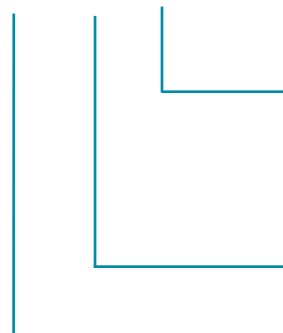
Other features of the resident diagnostics program are available at the operator's request, and when combined with an input/output monitor provide total indication of unit operation. For trend analysis, the failures are logged with date and time and remain available for display as needed.

SECURITY

The EPIC provides for a user specified security code entry before data may be altered. This security code entry is never required in order to view any parameter. The EPIC also has the ability to disable security code entry requirements for perpetual access.

Models

EPIC 1400 M01



Basic

M01= EF140 Connector
M01= EF140 Connector
& Memory Cartridge
M10 = NEMA A & B
Connector
M11 = NEMA A & B
Connector plus
Memory Cart

Option

0 = None

Option

0 = None
1 = "D" Connector
2 = "D" Conn + Port 3 RS232
3 = "D" Conn + Port 3 RS232
& Port 3 FSK 2 Wire
6 = "D" Conn + FSK Modem
8 = "D" Conn + Port 3 Fiber Modem
9 = "D" Conn + 2 Port 3 RS232

