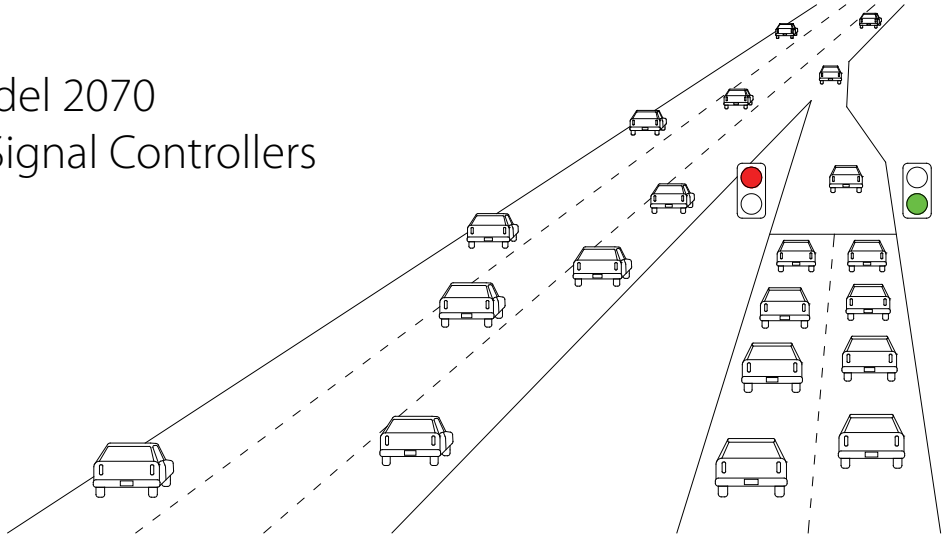
Ramp Meter Software Program 2042

For Model 2070 Traffic Signal Controllers



Overview

McCain's Program 2042 ramp meter software provides users an easy-to-use means of controlling traffic flow on freeway entrance ramps. Compatible with 2070 traffic signal controllers, the ramp meter software is capable of handling a variety of ramp configurations. When used in conjunction with mainline vehicle detectors, Program 2042 has proven to breakup entering platoons, help optimize mainline traffic flow, and enable freeway systems to accommodate larger traffic volumes.

Benefits

- Configure virtually any ramp meter with ease
- Optimize ramp meter wait times and freeway speeds
- Configure by time-of-day or in response to demand
- Accumulate vehicle data including volume, occupancy, and speed
- Integrate with central management software
- Compatible with standard, off-the-shelf Model 2070 traffic signal controllers

Product Description

McCain's Program 2042 ramp meter software controls traffic signals at freeway interchanges having up to six ramp lanes and 24 mainline lanes. Each lane is controllable via a pre-programmed time-of-day schedule, remotely from a central computer, or locally via front panel entry.

Integrated with vehicle and mainline detectors, the ramp meter software collects volume, occupancy, and speed. Accumulated data is available for transmission to a central computer where it may be leveraged to help optimize ramp meter operations.

The ramp lanes can operate independently or in groups, such that only one lane in each group has a green light.

Ramp Meter Software, Program 2042

At-A-Glance

Controller Models Supported	Model 2070 Model 2070 NEMA (with 2070-8 base)
Ramp Lanes Lanes Supported Mutually Exclusive Grouping Free Running Fixed Offset Green	 Up to 6, 4 detectors ea. ✓ ✓ ✓
Mainline Lanes	Up to 24, 2 detectors ea.
Metering Adjustment Modes Rate - adjusts by increments of VPH Level - preset metering levels by volume, occupancy, or speed	 6 rates 6 presets
Data Collection Volume, occupancy, speed, length Data archived Archive history	 ✓ Every 5 & 15 minutes Up to 7 days
Modes of Operation Manual Fixed Rate Traffic Responsive	 ✓ ✓ 5 modes
Metering Startup & Shutdown Startup Intervals Shutdown Intervals	 6 4
Communications Protocol McCain QuicComm AB3418 RS-232 IP	 ✓ ✓ ✓ ✓

System Functionality

Metered Lane Sequencing Modes

- Mutually exclusive - one green per lane at any given time
- Free running - unrestricted greens at any given time
- Fixed green offset - offset time between start of green from lane to lane

Detector Failure Modes

- Erratic count
- Maximum presence
- No activity

Detector Types (for Metered Lanes)

- Demand - one per metered lane, placed at stop bar; types of recall: full-time, normal actuation with recall upon failure, normal actuation with no recall upon failure
- Passage - one per metered lane, placed beyond stop bar; types of recall: full-time, normal actuation with recall upon failure, normal actuation with no recall upon failure
- Queue - two per metered lane; operate in intermediate or excessive mode

Scheduling

- Control manually, remotely, or according to schedule
- Four time-of-day schedules with 16 events each
- Holiday schedules enabled by date, day of week, or week of month

Operation Modes

- Manual mode - by lane
- Fixed rate - base metering rate individually programmable by lane and command source
- Traffic responsive - six metering rates per lane set in vehicles per hour

Warning Beacons

- Integrate with blank-out signs or beacons
- Steady or flashing outputs

Feedback Displays

- Real-time screens display status of all operational parameters
- Operational mode, signal interval, control source, current metering level and rate for each ramp lane
- Volume, occupancy, and speed for each mainline lane
- Status of all field I/O pins
- Status of all ramp and mainline detectors

Customer Support

McCain's ITS Solutions group provides support from system selection through integration, ensuring end-to-end functionality. Ongoing support is available online, over the phone, and via on-site or web-based trainings.

To learn more about McCain's Integrated Traffic Solutions, please contact info@mccain-inc.com or call (760) 727-8100

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