

GREENWave local intersection software

GREENWave is Oriux's world class leading local intersection software included on every Oriux ATC traffic controller, installed in over 30,000 intersections worldwide, providing users the flexibility of a variety of hardware configurations for different applications.

Featuring a powerful Linux based multi-process traffic engine and NTCIP communications protocol, GREENWave is easy to program from the front panel and remotely from one of several NTCIP-based central system software packages, including Oriux's Spinnaker ATMS. It also features a web interface for remote wireless access.

GREENWave also features the most advanced Transit Signal Priority (TSP) and Light Rail preemption algorithms in the market, including more ways to adjust signal operation, the fastest way to get back to coordination, 32 preemption inputs and peer to peer logic.

The powerful TSP logs in GREENWave provide a clear understanding of the impact of TSP events on general traffic and allow transit agencies to measure, track and improve TSP performance.



Specifications

- Linux based multi-process traffic engine
- Fully NTCIP compliant
- Embedded Web Server, allowing authorized users to remotely access and configure the controller through any mobile device
- The most Advanced Transit Signal Priority and Light Rail preemption algorithms in the market.
- High Density Logging, gathering data from all inputs and outputs in the controller on a 1/10th second basis.
- Specialty TSP logs, providing Transit agencies with data to measure, track and improve TSP performance.
- Traffic Engine Recording, providing users the ability to record the operation of the traffic engine for the purpose of troubleshooting problems
- Peer to Peer communications, allowing information to be sent directly from one controller to another
- Critical Intersection Control, allowing the cycle optimizer to add 4,8 or 16 seconds to the cycle if the intersection is saturated
- Advance Scripter, allows custom applications to be created without writing new software
- Dual Traffic Engine, Phase-based and Interval-based operation in a single unit - The ONLY controller in the world with this capability
- Supports transitions between phase-based and interval based operation with no need to restart the controller, merely by switching between patterns
- Support for interchangeable I/O and D modules modules are auto-recognized
- Full I/O mapping, every pin can be mapped to another function
- 32 preemption runs available for each traffic engine
- Supports 32 signal outputs and 8 rings
- Support for Added Initial, Gap Reduction, and Dynamic Max timing
- MMU status display
- Configurable Overlaps with Flashing Yellow Arrow
- Pre-timed timing and signal plan setup
- Support for standard and custom daylight savings time plans
- Ability to load pre-configured intersection setups from memory (a simple 8phase, dual ring setup, and an 8 phase dual ring setup with Coordination and Preemption configured.)
- Ability to copy screens of parameters between similar parts of the configuration database (e.g. Coordination pattern > pattern, day plan > day plan, etc.)
- On-screen diagnostics mode for I/O, Comms, Memory, Real-time Clock, and USB testing
- Low level device utilities menu for testing keyboard inputs, display performance, operating voltages and other system parameters
- Context-sensitive help screens throughout the front panel interface

