GreenWave

GreenWave is Oriux's traffic controller software package for its line of ATC controllers including the ATC-1000, ATC-2000, C-3000 and the new C-5000 traffic controller.

Featuring a powerful Linux-based multi-process traffic engine and environment, 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 server application that enables authorized users to remotely access and configure the controller through any mobile device connected to the network running a compatible browser, such as Internet Explorer, Google Chrome or Apple Safari. This feature gives users the flexibility to connect to the controller without having to leave their vehicles on those hot summer or cold winter days.

GreenWave features the most advanced Transit Signal Priority (TSP) algorithm in the market, with more ways to adjust signal operation and the fastest way to get back to coordination. It also features High Density Logging, gathering data from all inputs and outputs in the controller on a 1/10th second basis and record that data for later retrieval allowing Traffic Engineers the ability to observe the operation of the controller under real time conditions and make adjustments to timing to improve the operation of the signal

GREENWave

Specifications

- Embedded Web Server, allowing authorized users to remotely access and configure the controller through any mobile device
- The most Advanced Transit Signal Priority algorithm in the market
- High Density Logging, gathering data from all inputs and outputs in the controller on a 1/10th second basis
- 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 intervalbased 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 functionmenu

- Fully NTCIP compliant
- 32 preemption runs available for each traffic engine
- Supports 32 phases 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

```
1.1.1  TS22 Mon 04-Apr-2011. P1:OK
RING STATUS            15:53:22    CAB:00F7
R1 02 EXT 00.0 M1 005
      DW                    PRE INP
R2 06 GRN REST              PRE KBD
      DW
R3    RED REST
      DW
R4    RED REST
      DW

CALL STATUS  1111111
     1234567890123456  CRD CMD:254
VEH C C   C            SYS CMD:  6
PED   C C C C          TOD CMD: 11s
PHS
```

GreenWave provides an array of status monitoring screens