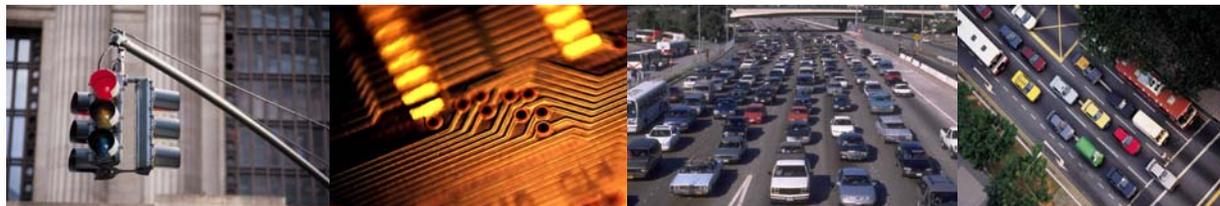


# W4IKS

## 170, 170-HC11 Local Controller Software



### DESCRIPTION

W4IKS is the most advanced, user friendly, and most widely used local controller firmware in the country. The IKS stands for "Includes the Kitchen Sink" and this firmware certainly lives up to it's name. W4IKS operates all 170, 170HC11, and 170ATC controllers. This versatile 170 program uses terms and timing parameters found in NEMA programs with the addition of many important features not found in any other programs. A unique command box feature allows users to "customize" the program to accomplish things that no other program can.

The philosophy at Wapiti Micro Systems is to provide a software package that is versatile enough to meet any unique applications your intersection may require. This concept eliminates the need for single application software that will only work in limited locations, this allowing the user to standardize on one software package that can be used anywhere! We designed the structure and operation of the program to meet the needs of the practicing Traffic Engineer and Signal Technician for now and in the future.

### FEATURES

- Provides 2 thru 8 phase operation of either isolated or coordinated traffic signals.
- Provides dual ring, fully actuated operation with either concurrent or exclusive phase timing.
- 8 independent programmable pedestrian outputs.
- 8 programmable overlaps, with outputs assignable to any loadswitch.
- 3 separate timing plans with separate phasing, input and output re-assignment, and extended outputs are available by time of day.
- Records vehicle counts for 12 phase detectors with a minimum duration of 95 hours.
- Provides pre-emption sequences for both railroad & emergency vehicle applications.
- Timing data backed up by EEPROM and NAVRAM contained on a prom module.
- 18 coordination plans, plus free and flash functions.
- 64 time of day and week entries and 9 yearly event functions.
- Timing data backed up by EEPROM and NAVRAM contained on a prom module.
- Provides a Time Clock for TOD/DOW control of phase timing, coordination, & external output functions.
- Timing accuracy of each timed interval shall be within 100 milliseconds of the programmed value.
- Provides two right turn arrow overlaps and eight full overlaps and all can be used in conjunction with emergency pre-emption.
- Utilizes a command box feature with a memory block of 384 bytes, which allows the operator to set up logic gates that can control any input or output.

## W4IKS Local Software

## FEATURES - (Continued)

**Functions on a per Phase Basis:**

Vehicle recall (max & min)  
 Ped recall  
 Lock and non-lock detection  
 Lead phases  
 Double entry  
 Sequential timing  
 Exclusive phasing  
 Simultaneous gap  
 Restrictive phasing  
 Rest in walk  
 Advance walk  
 Red rest  
 Volume density (gap reduction)  
 Max phase time  
 Sequential timing phases

**Timing Intervals per Phase:**

Max  
 Max II  
 Min green  
 Passage time  
 Min gap  
 Max initial  
 Yellow  
 Red Clearance  
 Walk  
 Ped Clearance  
 Added initial  
 Time to reduce  
 Time before reduction  
 Red revert  
 Walk II

## Traffic Management Software

W4IKS firmware has been designed to operate with W7OSM, an on-street master program also developed by Wapiti Micro Systems. Both have been developed to communicate with [TrafficView32](#), an advanced Closed Loop Traffic Management System. The purpose is to create a powerful system that allows a Traffic Engineer to fully control & maintain all of his intersections right from his desktop. [TechView](#) is a "Lite" version of TrafficView32 designed for the field technician to upload and download timings in the field. [PocketView](#) is another management tool that allows users to communicate to a controller through a pocket pc instead of a bulky laptop.

[Artery](#), is an advanced program designed to work with TrafficView32 and Wapiti software to aid the traffic engineer in designing optimal flow of traffic.

## GPS Time Update Version

Wapiti has developed a special GPS Time Update version of W4IKS local firmware and W7OSM master firmware for both the 6800 processor and the HC11 processor. This version allows your controllers to connect to a GPS receiver for ultra-accurate time reference.

## HARDWARE

W4IKS will operate on 170 controllers with Motorola 6800 processors & HC11 processors. A new version of W4IKS is now available to work with the 2070L controller, Intelight's SmartCard Processor, SBC Controller, and McCain's Coldfire Controller.

