

# V80.x Controller Software

Release Notes

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## Introduction

This document provides a brief description of the enhancements included within each new release of the v80.x software.

#### Release V80 4A Build 6331: November 2017

This section outlines some of the major changes in the release of V80.4A Build 6331.

- 1) Flashing operation supports 32 Phases and 32 Overlaps for Linux platforms and 24 phases and 24 Overlaps for OS-9 platforms.
- 2) Ped detector inputs increased to 32 to match 32 available Ped phases.
- 3) USB software operational enhancements for Trafficware 1C CPU boards
- 4) ATMS interface enhancements including control screen, Virtual Controller and database export.
- 5) Software now has the ability to call all 8 Alt Tables for all phase and detector selections.
- 6) Resolved startup issue with Ped/Grn Delay programming.
- 7) Resolved Startup sequence issues when using ITS cabinet.
- 8) Enhanced Preemption decision making when phases or intervals are changing.
- 9) Software efficiency enhancements for CPU's using the OS9 operating system.
- 10) Enhanced Volume and Occupancy logging capability within the controller software to store 90 days of data for up to 64 detectors. Added CPU performance diagnostic screens.
- 11) Added support for SD storage media. In particular volume occupancy logging can be saved to the SD device.
- 12) Added Detector status screens for detectors 65 through 128 including volume and occupancy status screens.
- 13) Various manufacturer interface enhancements and software development for V80.x software to properly operate. In particular, software was developed for Intelight 1C CPU boards.
- 14) Startup Enhancements including proper date/time logging of Power downs and resolution of startup issue with Ped/Grn Delay programming.
- 15) Added new SIU map selection for 18 channel cabinets
- 16) V80 interface enhancements for the Signal Performance Measure (SPM )logging interface.
- 17) Various Control screen enhancements including resolving issues with Ped/Veh calls.
- 18) Peer to Peer status screen enhancements
- 19) Ethernet communications control enhancements including communications flood control and database flood control.
- 20) Issue resolution for Critical SDLC faults when using SIUs and CMUs.
- 21) Virtual controller enhancements including the ability to show standard inputs /outputs when in debug mode

- 22) Front panel update and stability enhancements, when updating the database to the ram drive.
- 23) Database structure and database backup enhancements.
- 24) Various software enhancements for thirty-two phases as well as OS9 interface issues.
- 25) The VC can now use USB dbxxxxx.dat files directly from the controller.
- 26) Added parameter to all high priority preemptions under MM-3-1-8 (AdvTimes) called "DynExitMode" which allows modifications for the Dynamic Exit interval.
- 27) Added enhanced preemption Diagnostics screen (MM-3-1-7) for various Rail Operations scenarios including Preemption timeout, gate issues etc. as requested by PennDOT. This includes added functionality for gate down supervision and added functionality for preempt supervisory inputs.
- 28) Various preemption enhancements, for type LRV, including allowing the track interval to terminate prior to track phases reaching a rest state.
- 29) High priority Preemption locking was changed to follow the priority level when a preemption terminates, all preemptions of lower priority are cleared.
- 30) Resolved minor operational issue for Overlaps that run during a preemption.
- 31) Various Coordination operational enhancements including allowing the split editor to access and program all thirty-two phases.
- 32) Various Overlap enhancements including Overlap optimization. In addition when the overlap begins it clearance, the overlap channel starts yellow clearance at the same time that the parent phase starts yellow clearance.
- 33) Manual restart enhancements including the resolution of an Overlap issue on a manual restart when running coordination. The controller took three cycles to run all phases. Also added code such that phases that are start in yellow will act like start in green, and start in walk will act like start in green.
- 34) Added Preemption event logging enhancements.
- 35) The controller date/ time stamp will be passed to the CMU for update and logging purposes.
- 36) When the overlap is set in LRV mode, it will allow the track phases pedestrian movements to serve.
- 37) Added new alarms/events for preemption diagnostics enhancements programmed under MM-3-1-7.
- 38) Removed the modem and dial-up parameters from MM-6-1 screen.
- 39) Changed the minimum polling interval for Peer to Peer communications from 1 second to 0.1 second.
- 40) Added Enhanced Licensing features.
- 41) Resolution for units such as National standard ATC (Green Machine) to properly operate on TS2 type 2 ATC's including the D-Connector pinouts.

- 42) Units with an OS9 Engine board can now backup to the datakey while the controller is running.
- 43) Added a new programmable parameter to set the Offset sync pulse width under MM-2-1.

### Release V80\_4A Build 6430: January 2018

This section outlines some of the major changes in the release of V80.4A Build 6430.

- 1) Modified operation of the Independent Pedestrian (INDPED) type overlap to only start operation on first phase in a row with pedestrian recall, and not begin walk if the parent phase has a force off applied.
- 2) Modified the user interface for Green Extension Overlap Inhibits under **MM-1-5-2-3** renaming it to **ExInh** and allowing users to select the specific phases that will not run overlap green extension.
- 3) Modified the user interface to reflect GoBar Type overlaps under **MM-1-5-2-3**. Specifically renamed the parameter **GoBarNoDetReq** to **GoBarNoNext** and added GoBarMinFlash time.
- 4) Modified the operation of the Overlap Lock Inhibit feature for FYA-4 overlaps such that lock Inhibit will not be applied to the FYA yellow clearance (either after a protected arrow, or flashing arrow), if we are moving to (phase next is) an included/modifier phase.
- 5) Modified the FYA-4 overlap to **always** follow included phase clearance time following protected arrow even if Phrent Phase Clearances (**MM-1-5-1**) is set to OFF.
- 6) Added the ability to collect Volume and occupancy data for Overlap (VehEnh+) detectors.
- 7) Modified High Priority Preemption menu selection by combining Advanced Time and Initial Dwell screens into one named **AdvTime/InitDwll** under **MM-3-1-8**.
- 8) Modified High Priority Preemption menu selection by adding a new screen named **EnhancedTimes** under **MM-3-1-9**. This new screen allows the user to have the ability to select (or restrict) which phases can be used for preemption Dynamic Exit.
- 9) Modified the Gratuitous ARP feature to poll more often, thus effectively keeping it alive.
- 10) Various operational enhancements to ring logic and preemption logic.
- 11) Modified Flashing Yellow Arrow Overlap Clearance logic based on Parent Phase clearance settings.