

Tech Note (240208_01)

Date: February 8, 2024

Product: Aperio Platform

Subject: Firmware Release 4.2.5 & Essentials™ Software Release 4.2.5

Note: To download these releases visit our website at <https://brtint.com/downloads.html>

Firmware Release 4.2.5:

This release is meant to accompany Essentials release 4.2.5. It contains improvements and optimizations that increase the robustness and configurability of the Control Module.

Features: (Since the last firmware release, 4.1.0)

- Firmware may now add up to 32 Occupancy Sensors to a Channel. This is an increase from the previous limit of 8.

- Accepts a CANbus message from RD16 IOMs, running RD16 firmware version 4 and up, to resend settings to the module upon request.

Bugfixes:

- When using global inputs in a system, the updates to subscribers occur via an Unconfirmed COV broadcast. This broadcast had a destination of the entire BACnet internetwork. It has been amended to the more neighborly destination of only the local MS/TP network, reducing overall traffic on the internetwork.

- The beaconing period for said globals has also been increased from 10s to 60s. This helps subscribers who may have lost connectivity since the last COV to receive up-to-date information without having to flood the device on which the global resides with ReadProperty requests, thereby reducing overall traffic.

- During a mode transition from UnOcc to Occ with the Channel OFF & a Manual transition strategy, evaluate any Maintained Inputs. If a Maintained Input in the Channel is in the ON state, it should turn the channel ON, just as a Maintained State change, Momentary ON event, or a Momentary ON/OFF event that occurred just after this mode transition would.

- Amendment to LSC initialization behavior. Sending settings to a controller now counts as an 'occupant interaction event'. Here is an example of when such a behavior would be useful: A Zone has a Channel which has no Switches, Stations, or Occ Sensors, just LSC, and the Channel is in Occ Mode 24/7. If settings at night then the Channel now goes/stays On immediately. And later, Off when higher daylight readings arrive. The cycle continues thereafter. Previously, if settings were sent at night for such a channel, one would have to wait for the sensor to cycle through a high and then low threshold reading or toggle the Zone Run Command to activate LSC "On Above" logic.

Upgrade Instructions: As is good practice with any upgrade, make sure to create a backup of the Controller's settings by doing a "Retrieve Settings" followed by a "Save As" of those settings into a separate file.

Essentials Release 4.2.5:

This release is meant to accompany Firmware release 4.2.5. Though it will work with any firmware, it will display the most information when it can take advantage of features built into the latest Firmware release.

Feature Additions: (Since the last firmware release, 4.2.1)

- Essentials has gained the ability to add up to 32 Occupancy sensors to a Channel. This is an increase from the previous limit of 8.