

SUBJECT: Smart Equipment™ (SE) Control Version 4.4.0.31 Firmware Update Release

Date Issue: 10/5/23

Ducted Systems is pleased to announce the release of v4.4.0.31 firmware update for Smart Equipment™ control boards; featuring new firmware upgrade improvements, several fixes, and a few modifications to current control applications. Please see Offerings Catalog under Packaged & Split DX Systems | Light Commercial Controls | Smart Equipment Controls for full details on changes included in this firmware update.

Norman production lines will be phasing in this new firmware patch in early 2024. In the meantime, implementation of 4.4.0.31 will have to be done either through an in-person manual update or through an over-the-air remote update using a Verasys SBH300. Confirming the firmware version that is installed on a Smart Equipment Control Board can be determined through the LCD Display manual navigation or through the MAP Gateway user interface via a smart device.

Customers with existing units with older firmware versions that would like to upgrade to v4.4.0.31 may do so if they choose (which is always recommended but is not required). Instructions on how to upgrade units and the files are posted on Solution Navigator under **Resources > Product Tools > Ducted Systems > UPG Tech Service Software** with the firmware package **4.4.0.31.secusb.pkg** as well.

With the release of v4.0 in January 2020, which provided additional features, menu structures, and supported applications, it is still encouraged that customers update their Mobile Access Portal (MAP) Gateway tools to make Smart Equipment v4.0+ additions visible.

The MAP must already be on firmware version 5.1.0.355 to view latest features. Instructions on how to upgrade the MAP Gateway can be found on Solution Navigator under **Products > Commercial Ducted Systems / Light Commercial Controls > Light Commercial Controls > Light Commercial Controls > Smart Equipment Controls** with the firmware package as well.

Please note, all 4.4.0.31 Smart Equipment Units that have been manually updated will remain compatible with Verasys and still require the BACnet communication cards to integrate. Please visit www.verasyscontrols.com for more information on Verasys.

Change-Log Summary

Firmware Updates

- SSE-1347 – Increased stack size of the provisioning validation task in factory test to avoid a memory leak
- SSE-1632 – Fixed memory leak in flash statistics server that could cause a boot failure after the board restarts
- SSE-1658 – Updated zlib 1.2.7 to 1.2.13 to fix security vulnerabilities
- SSE-1667 – Change the naming scheme of the OTA (remote) package to be used on the SBH to this format: [version]_SE-SPU1002-0_remote_ota_update.zip
- SSE-1731 – Added NSW8000 support and fixed an issue that caused Net Sensor setpoints to lose their values after a Unit system change (Imperial to SI units or vice-versa)

Control Application Updates

- Application Versions:
 - UCB: 13
 - Economizer: 4.0.0.937
 - 4 Stage: 7
 - FDD: 4.0.0.210
- Enhancements
 - SSE-983 – Added functionality to support modulating neutral air HGR
 - New points 'Neutral Air ModHGR Enable'/'NeuAirModHGR-En' (default: Disable) and 'Neutral Air ModHGR Offset'/'NeuAirModHGR-Off' (default: 0°F) added to Details > Hot Gas Reheat > Setup, and to BACnet/Modbus/N2. They only show if 'Neutral Air ModHGR Enable' is first enabled via restore process.
 - SSE-1483 – Added functionality to support dual fuel heat pumps
 - New point 'Dual Fuel HP Enable'/'DualFuelHP-En' (default: Disable) added to Details > Heat Pump. Only shows if 'Dual Fuel HP Enable' is first enabled via restore process.
 - New point 'Dual Fuel OAT HP Cutout'/'DualFuelOATHPCutout' (default: 40°F) added to Details > Heat Pump, and to BACnet/Modbus/N2. Only shows if 'Dual Fuel HP Enable' = Enable
 - New point 'Reversing Valve Delay'/'RevVlvDelay' (default: 0 seconds) added to Details > Heat Pump. Only shows if 'Dual Fuel HP Enable' = Enable
 - SSE-1252 – Updated supply fan tuning parameters for SZ VAV cooling so that the supply fan will respond faster

Bug Fixes

- SSE-761 – Added logic to hide 'HeatCool Setpoint Mode' when controller is in VAV mode (FanCtl-Type = Variable Speed and SZVAVEn = Off)

New Dictionary Entries

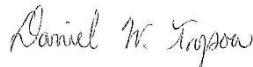
- Note: if MAP or other device not updated with newer version of dictionary, these strings will show up as the number of the id
- Set 1709
 - NeuAirModHGR-En (id: 792)
 - NeuAirModHGR-Off (id: 793)
 - DualFuelHP-En (id: 794)
 - RevVlvDelay (id: 795)
 - DualFuelOATHPCutout (id: 796)
- Set 1714
 - Neutral Air ModHGR Enable (id: 281)
 - Neutral Air ModHGR Offset (id: 282)
 - Dual Fuel HP Enable (id: 283)
 - Reversing Valve Delay (id: 284)
 - Dual Fuel OAT HP Cutout (id: 285)

For any additional questions, please reach out to our product management team below.

Regards,



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