

Quality and Continuous Improvement

Number: TIC2023-0011 Date: 8/10/2023

Title: Software 4.47 Release

Product Category: Residential Communicating Systems

Products Affected:

Residential Communicating Systems ION™ Controls

Situation

A new software version will be released (OTA) in the week of August 14th, 2023, and available on HVACPartners and the consumer website to download for the ION™ wall control.

Version 4.47

- Integrate New Communicating gas furnace models into the System Control (Release expected later this year).
- Integrate New Communicating Fan Coil model into System Control (Release expected later this year).
- Add A2L (R454B Refrigerant) Mitigation Response.
- Create user adjustable setpoint limits for both heating and cooling.
- System monitoring to not alert for over-cool to dehumidify while in the Away profile.
- Improved OTA speed for wall control.
- Changed text on UI to "enable/disable" system monitor versus "on/off".
- Improved reference in the 'system malfunction' screen as the originator of the malfunction.
- · Added all N and V coil models.

Version 4.38 (April 2023 - Partial Release)

- Corrected System Monitor alerts sent when set for Celsius (code 140-148)
- Update to customer email notifications that were not being sent from the MQTT device
- Added "N" coil model selections to the charging lookup screens
- Added download and status indication for software updates
- Allow vacation mode to be set via the app
- Update (EULA) End User License Agreement



Version 4.31 (December 2023)

- MQTT data rate limiting until app usage is active.
- Reminder alerting homeowners that they must download and use the new mobile app (Pop up message reminding users to transition from the legacy app to the newer app).
- System monitor added software routine to the lon™ control (released default as disabled)
- Enable/disable for system monitor (provide an option to turn on or off this feature)
- Ability to clear stored Wi-Fi credentials (existing control with new homeowner)
- New V coils added to coil selection screen for refrigerant charging

Version 4.17 (May 2022)

- Updated cloud connection interface to improve the response time between mobile app and wall control.
- Added QR code generation & display support for wall control models.
- Added QR Code feature to access consumer site and release notes directly from mobile device.
- Added EULA firmware to support wall control software update acceptance.
- Added a screen where the user can set the "trip point" when a notification is sent based on their temperature and humidity max and min points selection.
- Added Low humidity alert fault code 191.
- Added ability to reset equipment reminders via mobile app.
- Updated Filter check logic to operate based on pressure monitor status.
- Addressed the issue to report consistent Energy tracking information. between wall control display and mobile app.

Version 4.05 (September 2021)

- Fully implemented 802.11n protocol. Resolved 802.11n connectivity issue introduced with version 3.94.
- Updated strategy to distribute additional air flow caused by two consecutive limit 4 faults by fully opening dampers for zones with a heating call and distributing excess airflow required to zones based on size of the zone. Display message on System Wall Control when furnace is in an altered strategy mode (126 Active Heat Cycle Active).

System Fault 126-HIGH HEAT CYCLE ACTIVE



- ULN 2 Stage Furnace, created a fault 6 results in a high heat cycle lockout for one heating cycle.
- SmartSense (5 Stage Units) with FER furnace boards, continuous fan (low and medium) now operates at the minimum CFM if requested CFM is below minimum.
- Addressed airflow limited stage downs that occurred with older 2 stage ODUs and v3.94 system control software.
- Updated the blower motor fault type (Code 4 + 1) from System malfunction to System fault
- Fixed issue where system could operate in the wrong mode set by the user, resulting in possible over-conditioning.
- Energy tracking feature is updated to display daily usage values accurately in respective columns
- Addressed connectivity issues with 802.11n compatible routers
- Added capability for resetting reminders via cellphone app.
- Track the cycle and hours of the variable speed operations
- Displaying run time hours and Cycles for supported IDU and ODUs is implemented.
- Wall control not clearing the root cause diagnostics on a reset to factory defaults
- When the last 10 faults are specified to be factory reset, the last 10 faults and root cause faults recorded will be restored to factory defaults.
- Displaying run time hours and Cycles for Modulating furnace is implemented.
- Addressed the issue to report valid ODU model upon new system installation
- Low/High Temp and high humidity conditions should be configurable for the user
- Added feature to configure Low/High Temp and high/low humidity alerts.
- If a utility event with offsets is received, then UI notification will show the actual offsets by which setpoint is being changed.
- Updated the dehumidification airflow logic so that the dehumidification airflow matches the expected airflow.
- Wall Control software has been updated so that old faults having same fault code number will
 not be shown as active on UI Screen and equipment events packet
- Account registration with mobile app using QR Code on GUI
 Displays a QR code on the registration info screen. The QR code contains the S/N number,
 MAC address, and pin number delimited by commas. The code reflects the current screen
 values. Note: This feature requires the new mobile app, available soon.

Version 3.62 (December 2020)

Fixed issue that prevents Wi-Fi connection to certain 802.11n-only routers, and a small subset of routers running in a "mixed mode" (802.11b/g/n). Solution is to enable the High Throughput Rates so the control can communicate via 802.11n.



If you are not experiencing connectivity problems, then there is no need to install this update.

Version 3.61 (October 2020)

Reduced the Maximum Transmission Unit (MTU) to resolve connectivity issues with certain Internet Service Providers. *If you are not experiencing connectivity problems, then there is no need to install this update.*

Instructions for the software download and updating the ION control can be found online in the ION System Control Version 3.61 Release Notes. Use the download link provided in the EULA document and then follow the instruction in the following pages to set up a TSTAT folder on an SD card and install the software on the ION control.

Version 3.60 (September 2020)

- Some users experienced 3.40 OTA update leading to the screen going blank; wall control then recovers to v3.00 upon forced reboot. The primary cause has been corrected; but additional analysis is in progress to ensure this will not happen in the future.
- False G-terminal Alerts could be triggered during learning process check, if the system control reads the status inputs from furnace and fan coil before they have been set properly.
- Utility Curtailment feature when active will get recorded in Last 10 events screen

Version 3.40 (June 2020)

- Energy Estimate calculation issues, causing Energy estimates to appear to be much higher than expected.
- Operating status on the home screen is now aligned with the actual equipment operation.
- Blower RPM now shows actual RPM value when the IDU blower is operating.
- System control was showing improper stages and empty values on the "Cycle Counters" and "Lifetime Hours" screens for a 1 Stage ULN furnace.
- Outside Air Temperature (OAT) value is always -12 F and not able to change in capacity limiting Heating screen.
- Update equipment run-time parameters in the checkout mode.



Version 3.00 (April 2020)

Version 3.00 software includes the following updates to the ION control:

- Improvements to Wi-Fi and connectivity long-term stability.
- Fixed various minor faults
 - Minor GUI corrections and improvements
 - Fixed GEO HP integration configuration
 - o G-Terminal configuration
- Multiple causes of Reboots found and corrected