

# Ion™ System Control Version 3.40 Release Notes

June 15, 2020

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## **General**



This document is provided in conjunction with the “hex” file [BINF0340.hex](#), which comprises the executable code for the following ICP Ion System Control model numbers:

- SYST0101CW

This software is **ONLY** compatible with this model wall control.

Detailed instructions on uploading this software into the ICP Ion System Control are included in this document. The software release package is available through this link:

[http://cacbdpapps.net/marketing/eula/ICP\\_Ion\\_V0340\\_EULA.html](http://cacbdpapps.net/marketing/eula/ICP_Ion_V0340_EULA.html)

**Note:** This software is for the Series B controls only. The Series A controls cannot use Series B software and vice-versa.

## **Copyright Notice**

Carrier Corporation is the copyright owner of this material. Copyright laws and international copyright treaties, as well as other intellectual property laws and treaties protect this software update package. User may not and shall not copy or otherwise reproduce or make available to any other party any part of or the entire software update package. The User may, however, make one (1) copy of Software for backup or archival purposes.

## **End User License Agreement**

The user **MUST** read and accept the **End User License Agreement** included with this software package **BEFORE** downloading and using this software update package. If you do not accept the End User License Agreement, this software package must be deleted from your computer.

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### **Revision History**

#### **Version 3.40 (June 2020)**

Version 3.40 software includes the following updates to the Series B Ion™ System Control:

Updates:

- Energy Estimate calculation issues, causing energy estimates to appear to be much higher than expected.
  - Energy usage was displayed incorrectly, giving a false reading of estimated energy used. This change is a modification of the conversion of watts to kilo watt hours (KWH). Under energy tracking, in the view energy usage screens, energy used is now displayed in KWH.
- Operating status on the home screen is not aligned with the actual equipment operation.
  - Home Screen equipment operation is now aligned to actual operation.
- Blower RPM shows as 0 when the IDU blower is operating.
  - The Blower RPM value was outputting 0 on the AC/HP checkout screen, so the AC/HP checkout screen has been updated to output the actual Blower RPM value.
- System control was showing improper stages and empty values on the “Cycle Counters” and “Lifetime Hours” screens for a 1 Stage ULN furnace.
  - Adjusted both screen layouts to properly account for a 1 Stage Furnace and Input the proper runtime values to the new design.
- ULN 90 Communicating Furnace Control - Wall control updates
  - Wall control updated the level of furnace control fault code 26 to malfunction fault and increased the number of re-settable furnace faults from 19 to 20.
- Change default for time synchronization from disabled to enabled.
  - When connected to the server via Wi-Fi, the system control can automatically synchronize the local time based on date/time stamps received from the server. The system control has been updated to make this automatic synchronization the default, so it does not have to be enabled by the installer or homeowner. It can still be disabled, if desired.

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### **Version 3.00 (April 2020)**

Version 3.00 software includes the following updates to the Series B Ion™ System Control:

- Improvements to Wi-Fi and general connectivity long-term stability.
- Fixed various minor faults
  - Energy tracking and ENERGY STAR improvements
  - Minor GUI corrections and improvements
  - Fixed GeoHP integration issues (including Lake Loop Lockout)
  - Multiple causes of Reboots found and corrected

### **Version 2.40 (January 2020)**

Version 2.40 software includes the following updates to the Series B Ion System Control:

Major updates:

- Added support for OpenADR2.0b compliance
- Backward compatibility with OpenADR2.0a
- Added support for FER airflow change requirement
- Added fix for the GeoHP Lake loop lockout feature
- GUI updates to support GeoHP Lake Loop
- Fixed various minor faults

### **Version 2.00 (August 2018)**

Version 2.00 software includes the following updates to the Series B Ion System Controls:

Improvements to Wi-Fi/server connectivity

Correctly recognizes wired remote room sensor connected to Zone 1 via 4-zone control

Caching of ENERGY STAR data to prevent data loss

Improved validation for US and Canadian postal codes for weather forecast

Corrections to info help text for various screens

Various minor bugs corrected

### **Version 1.32 (March 2018)**

Version 1.32 software includes the following updates to the Series B Ion System Controls:

Additional furnace coil selection options in learning process when detecting a variable capacity ODU and a furnace.

Added support for variable capacity AC outdoor unit.

Corrected an issue where selecting the furnace coil CHPH\*\*61 when learning with a variable capacity outdoor unit sets the coil factor to 0 instead of 2.02.

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## Version 1.31 (December 2017)

Version 1.31 software includes the following updates to the Series B Ion System Controls:

### **ENERGY STAR® Connected Thermostat (CT) Certification Preparation**

Data collection and reporting for ENERGY STAR compliance has been updated.

The EPA requires 12 months of data collection before certification may be applied for.

That means that the earliest we expect ENERGY STAR certification is January 2019.

Note that data for ENERGY STAR certification is collected on an anonymous basis. No personally identifiable information is included, or sent to the EPA.

Note that the EPA has not finalized the ENERGY STAR CT requirements for multi-stage systems like Infinity Systems. Therefore, further updates for collecting ENERGY STAR data may be required.

### **Screen Saver**

Corrected a defect where new screen savers were placed on top of old screen savers, creating a double image.

### **“Phantom” Email Notifications**

Configuration change emails associated with daily airflow verification tests, usually occurring around 1pm local time, have been suppressed.

## Version 1.30 (November 2017)

Version 1.30 software includes the following updates to the Series B Ion System Controls:

### **Internet Connection Improvements**

Internet connection to the Infinity server is more robust, leading to fewer server disconnects.

Connection to local wireless networks is more robust, leading to fewer local network disconnections.

### **Forcing a Reboot**

If needed, the homeowner may force a reboot of the wall control by pressing anywhere on home screen and holding for at least 10 seconds.



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## **Improved Temperature Compensations**

Corrected a defect in the temperature compensation algorithms causing inaccuracy of up to 3 degrees F.

If an offset has been entered in the field to compensate for this issue, it should be removed when upgrading to Version 1.3 (Version 0130).

## **ENERGY STAR® Connected Thermostat (CT) Certification Preparation**

Data collection and reporting for ENERGY STAR compliance has been implemented. The EPA requires 12 months of data collection before certification may be applied for. That means that the earliest we expect ENERGY STAR certification is January 2019.

Note that data for ENERGY STAR certification is collected on an anonymous basis. No personally identifiable information is included, or sent to the EPA.

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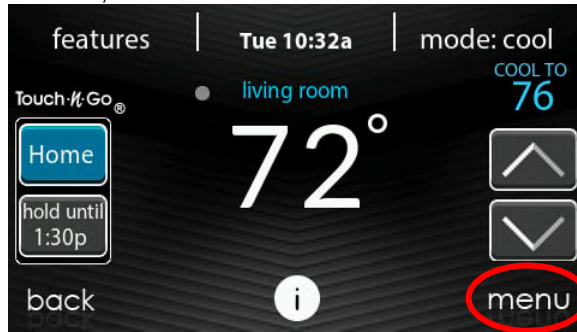
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## Installation Instructions

### Finding the Current Software Version

Before starting the software installation process, the current software version may be determined as follows:

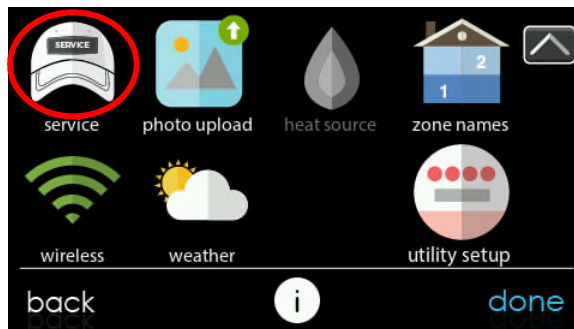
Press **menu** on the Main screen,



and then the down-arrow to go to the second menu screen.



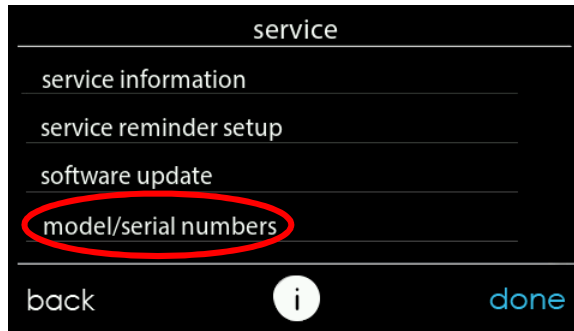
Touch **service** icon.



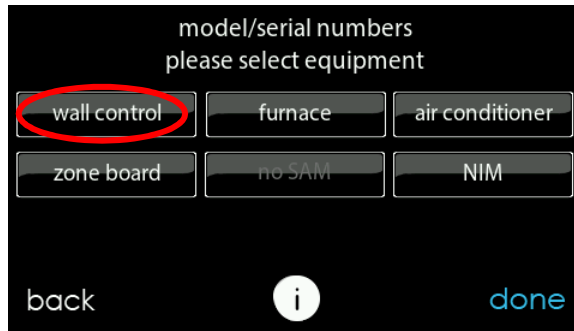
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Touch **model/serial numbers** on the resulting screen.

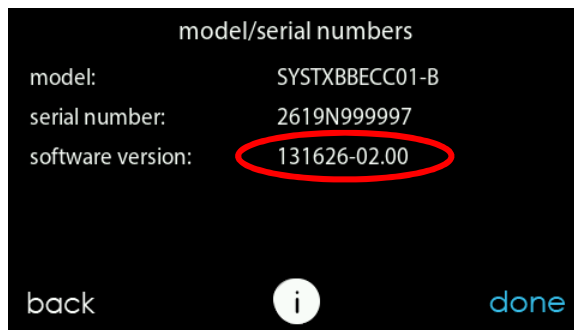


Touch **wall control** on the resulting screen.



View the Software Version number.

Software Version 131626-02.00, for example, is the production software version 2.00, released in August 2018.



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## Downloading the Software Update

For Series B controls, software updates are provided over-the-air (OTA), or uploaded manually using a microSD memory device. The following instructions apply to the manual update process.

You will obtain best results using a MicroSD card that is between 4GB and 32GB in size, and formatted as a FAT32 device. Any other formatting (NTFS, exFAT, etc.) will result in an error of “please insert MicroSD card.”

To perform a control software update, follow these steps:

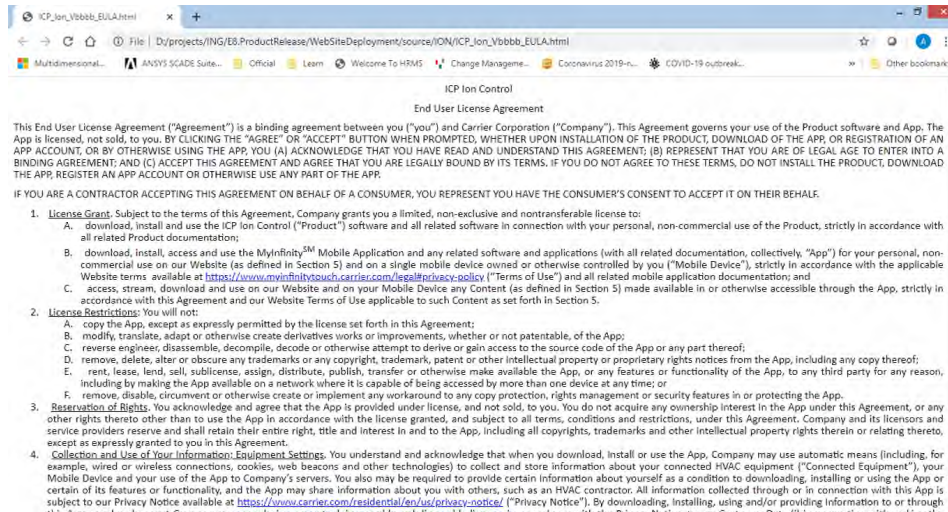
- Click on this link to obtain the updated software:

[http://cacbdpapps.net/marketing/eula/ICP\\_Ion\\_V0340\\_EULA.html](http://cacbdpapps.net/marketing/eula/ICP_Ion_V0340_EULA.html)

If the link does not work properly, copy the link into your browser web address window and open the link.

**NOTE:** You may NOT distribute the software itself. You may only distribute the link to the software, or this document.

- Read the End User License Agreement (EULA).



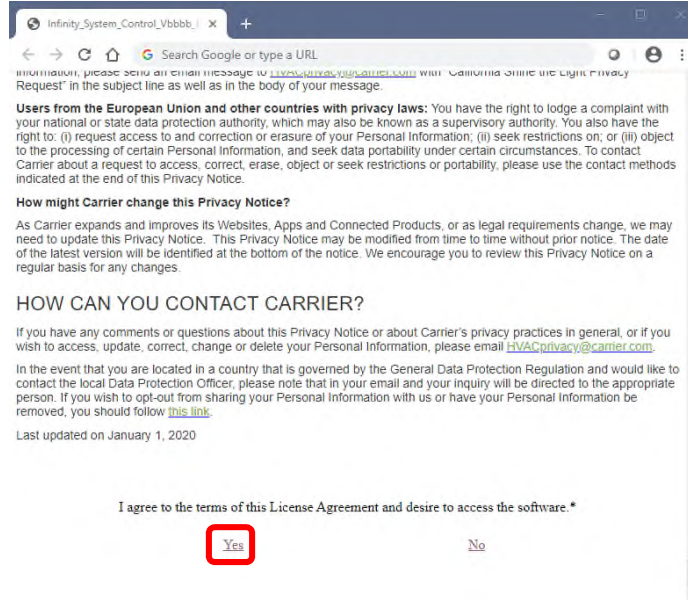


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- At the bottom of the EULA, choose “Yes” if you accept the agreement. If you do not wish to accept the agreement, you will not be able to download the software update.

**NOTE:** EACH user must accept the EULA each time the software is downloaded. You may NOT distribute the software itself. You may only distribute the link to the software, or this document.



- Use the Download link provided in the EULA document to download the software update package.

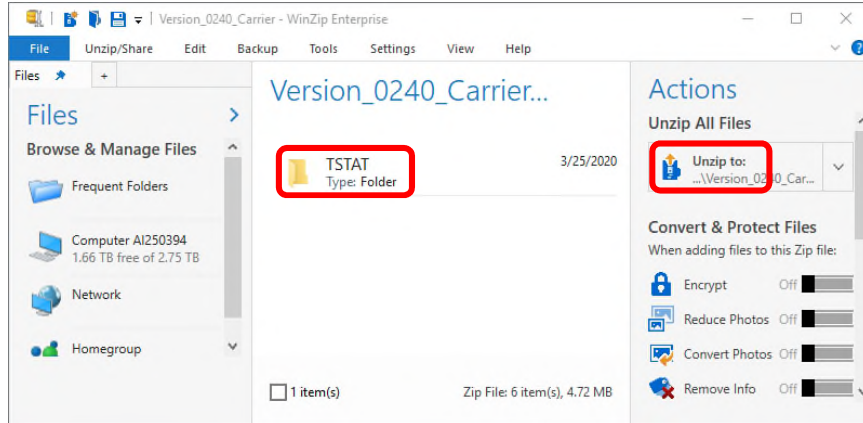


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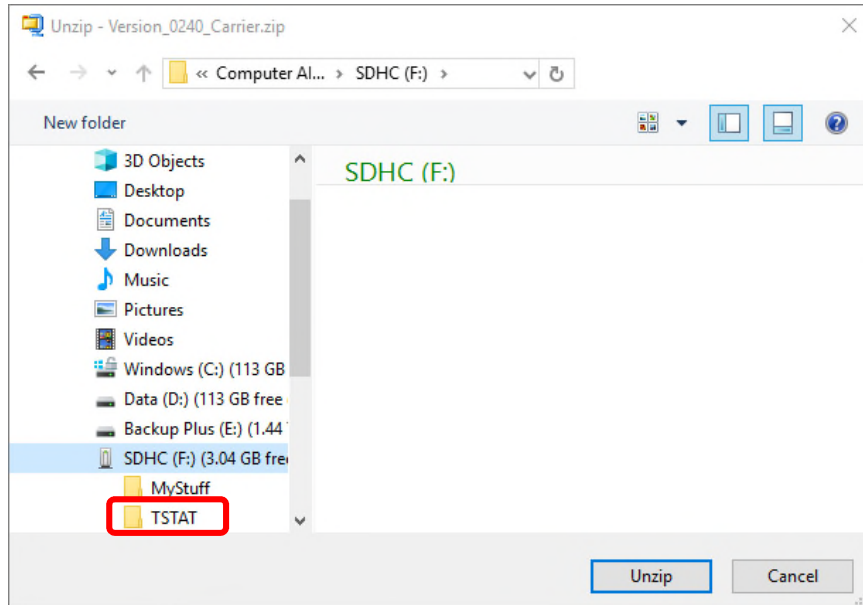
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- Once the file has been downloaded, open it in WinZip. Select the **TSTAT** folder, then the **Unzip to** action.

**NOTE:** The names of the files in the images below are examples, and will change with the latest version numbers.



- Choose the MicroSD memory device as the location to which to extract the folder from the zip file. This will create a new **TSTAT** folder, or over-write the existing **TSTAT** folder and any files contained within it. Click **Unzip**.

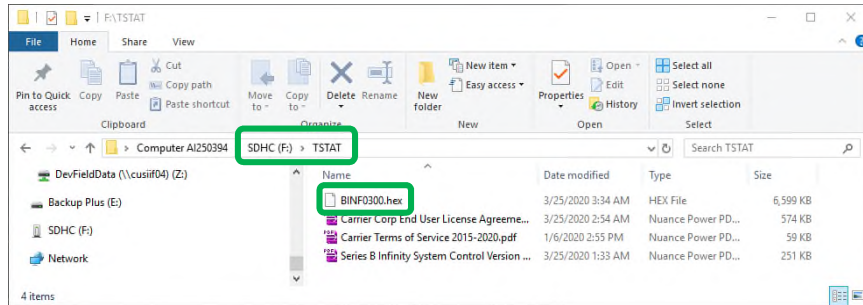


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- Verify that the files, including the [BINF0340.hex](#) file, have been extracted into the TSTAT folder of the MicroSD device. Note that the “USER” folder is where the photo and schedule files would be stored.

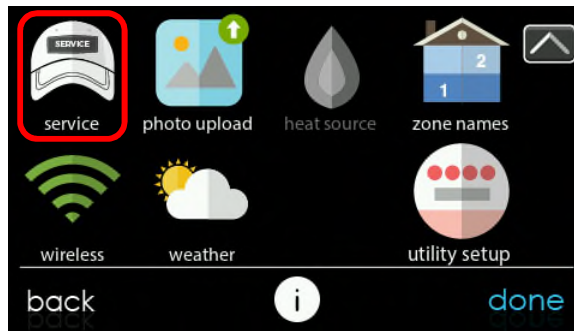
**NOTE:** The names of the files in the images below are examples, and will change with the latest version numbers.



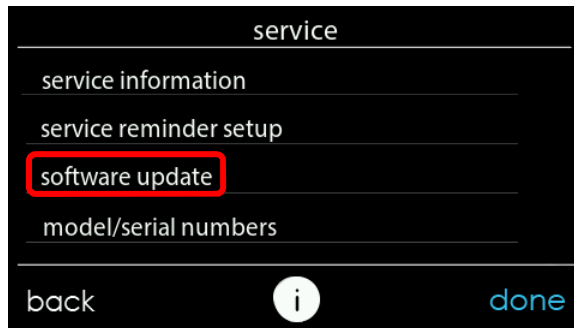
Next, eject the MicroSD from the PC and go on to the installation, below.

## Installing the Software Update

- From the **MENU** screen, select the **service** icon.



- Select **software update**. If this option does not appear, your dealer will need to install your software. Contact your dealer for assistance.



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- Select **update software using MicroSD card**.



- Select **system control software update**.

**Note:** Some systems may include HVAC equipment capable of accepting a software update, but that is not covered in this document.



- Plug the MicroSD card into the bottom of the control.

*If this screen continues to appear, recheck the device and formatting. See the top of Page 1.*



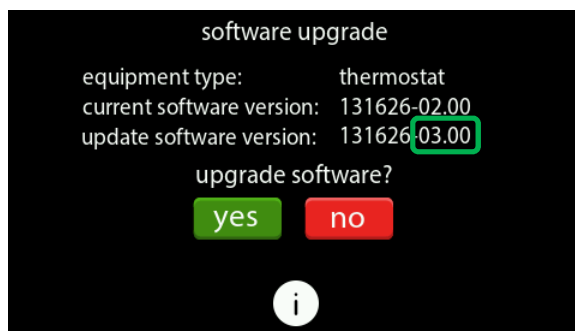
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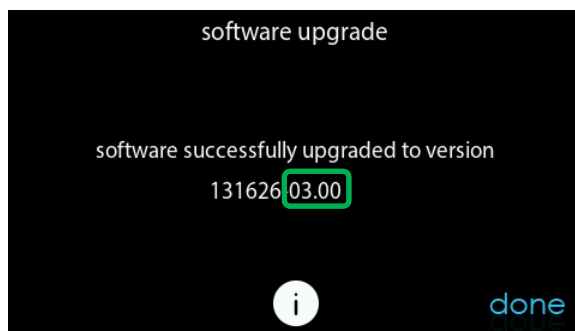
- If the .hex file is stored properly on the MicroSD device, this screen will appear. If the screen says, “Please insert MicroSD Device”, remove the MicroSD device and re-insert. If it still does not show the screen, below, go back to the download part and retry.

**NOTE:** The names of the files in the images below are examples, and will change with the latest version numbers.

Press **yes** to continue with the software upgrade. The upload and installation will take several minutes.



- When the software upgrade is complete, a “successful” message will appear.



- The control will perform a restart after the **done** button is pressed.

There will be a longer than normal delay for the wall control to restart since part of the process at this time is the completion of the new software installation. Once the control has successfully restarted, the MicroSD device may be removed.



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- This completes the software upgrade process.  
You may want to confirm the new software version, as described above.