



HONEYWELL WIFI THERMOSTAT PLUG-IN FOR HOMESEER HS4

VERSION 4.3

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TERMS & CONDITIONS

Honeywell has chosen not to provide access to their API to anyone other than large businesses. As a result, this plugin uses the only way available to control these devices: the Total Connect™ Comfort Portal (TCCP). This means that if Honeywell changes their website, work will have to be done on this plugin to make it compatible, and that there is a chance the website changes could render it inoperable. These changes are done without my knowledge or control, and your purchase/use of this plug-in is as-is and at your own risk.

Furthermore, excessive activity on your account may result in your account being suspended, requiring you to call Honeywell and get it re-activated. While this plugin has been designed to minimize the chances of this occurring by implementing preventative measures such as queues, timers and minimum command, update and polling frequencies, these values can be changed by the user. Regardless of the values entered (be they the default, smaller or larger), by activating this plugin in your HomeSeer software, you acknowledge this risk and agree to indemnify and hold harmless the developer of this plugin, HomeSeer Technologies, and any other third party plugin developers from any damages (including but not limited to financial, time spent, opportunity cost, loss of account privileges, and the inability to control your thermostats or other connected devices).

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OVERVIEW

The skWare Honeywell WiFi Thermostat Plug-In for HomeSeer provides you with a way to monitor and control your Honeywell Total Connect™ Comfort-controlled thermostat from HomeSeer.

Thermostat | First Floor

First Floor (148) Today 2:38:20 PM

Status (149)	Success	Today 2:40:04 PM	<input type="button" value="UPDATE"/>
Cool Setpoint (150)	74F	Today 2:34:14 PM	<input type="text" value="74F"/> <input type="button" value="-1"/> <input type="button" value="+1"/>
Heat Setpoint (151)	72F	Today 10:01:56 AM	<input type="text" value="72F"/> <input type="button" value="-1"/> <input type="button" value="+1"/>
System Mode (152)	Heat	1/15/2021 5:36:08 PM	<input type="button" value="AUTO"/> <input type="button" value="COOL"/> <input type="button" value="HEAT"/> <input type="button" value="OFF"/>
Operating Status (153)	Heating	Today 2:39:05 PM	
Operating Mode (154)	Heat	1/15/2021 5:36:08 PM	
Fan Mode (155)	Auto	1/15/2021 5:36:08 PM	<input type="button" value="ON"/> <input type="button" value="AUTO"/> <input type="button" value="CIRCULATE"/>
Fan Status (156)	Off	1/15/2021 5:36:08 PM	
Indoor Temp (157)	72°F	Today 10:01:56 AM	
Outdoor Temp (158)	42°F	Today 2:39:05 PM	
Outdoor Humidity (159)	43%	Today 2:09:11 PM	
Hold Type (160)	None	Today 10:01:56 AM	<input type="button" value="NONE"/> <input type="button" value="TEMPORARY"/> <input type="button" value="PERMANENT"/>

INSTALLATION

This Plug-In is installed using the built-in updater capability of HomeSeer. New installations include the binaries and supporting files needed to run the Plug-In, and updates will replace any of those items that have changed.

Before you set it up, you must create your account, login, and acknowledge any alerts or notifications on [Honeywell's Total Connect Comfort website](#). It may be necessary to do this from time to time as changes are made to the site.

SYSTEM REQUIREMENTS

The skWare Honeywell WiFi Thermostat Plug-In for HomeSeer runs on both Windows and Linux installations of HS4 version 4.2.19.0 or higher.

On Linux, this plug-in requires Mono 4.8.1 or higher. For Windows servers, it must be Vista or newer.

The following thermostats have been tested with this plug-in, but any plugins controlled via the Honeywell Total Connect™ Comfort Portal (US-based models only at this time) may work. Please report back via the HomeSeer forums if you have success or problems with any specific model.

- [RTH6580WF](#) - Wi-Fi 7-Day Programmable Thermostat
- [RTH9580WF](#) - Wi-Fi Smart Thermostat
- THX9421R5021 - (Redesigned) Prestige 2.0 IAQ*
- THX9321R5000 - Prestige HD*
- THX9321R5030 - Prestige HD*
- TH8321R1001 - (All-New) RedLINK VisionPRO 8000*
- TH6320R1004 - FocusPRO® 6000 Wireless (programmable)*
- TH5320R1002 - FocusPRO® 5000 Wireless (non-programmable)*

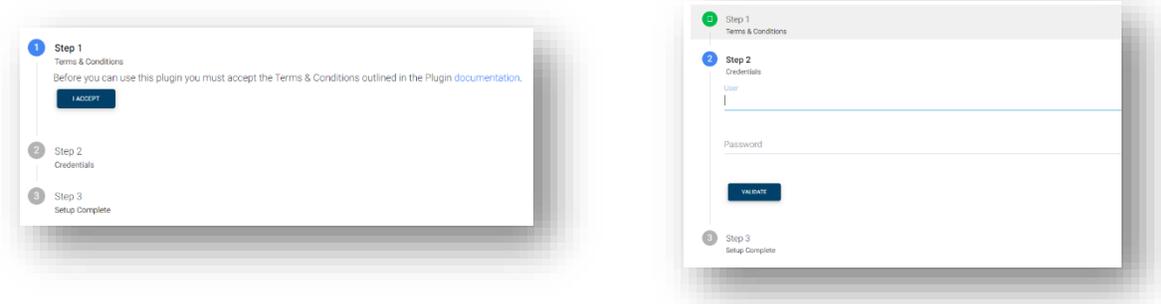
*With a RedLINK Internet Gateway (THM6000R1002).

CONFIGURATION

After installing the Plug-In, a new “Honeywell WiFi Thermostat” menu item can be found under “Plug-Ins” menu in the HomeSeer browser interface.

INITIAL SETUP

When the plugin first starts, the “Initial Setup” menu item will walk you through the first steps. After accepting the Terms & Conditions, you will be prompted to provide your My Total Connect Comfort Portal credentials.



Completing the setup process will send you to the “Thermostat List” page.

THERMOSTAT LIST

On the “Thermostat List” page, you can add one or more thermostats to be controlled by HomeSeer by selecting from the available thermostats listed on the Total Connect Comfort Portal. Click “Update List” if the list shown does not include any newly added thermostats. It will show both the assigned name in Honeywell as well as the name of the root device in Homeseer (which you’re free to change in Homeseer after the device is created).

Thermostats						
Location	Thermostat	ADD	UPDATE LIST			
Thermostat Name	Device ID	Homeseer Device	Min Cool	Max Cool	Min Heat	Max Heat
2nd Floor	[REDACTED]	2nd Floor	50	99	40	90
3rd Floor	[REDACTED]	3rd Floor	50	99	40	90

Once your thermostats are saved and created, for each device you can edit the minimum and maximum allowed cool or heat setting – these do not replace the settings on the thermostat, but rather are specific to HomeSeer. Attempting to go above or below these values is not allowed in HomeSeer events, and if a change beyond these limits is detected on a status update, it will be adjusted up/down to the limit accordingly. plete.

You can also highlight a thermostat in the list and click “Remove”, which will delete the associated devices.

SETTINGS

After installing the plug-in, a new “Honeywell WiFi Thermostat” menu item can be found under “Plug-Ins” menu in the HomeSeer browser interface. The “Settings” item will take you to the configuration page, where you are able to setup additional options for the plug-in.

After the initial setup, you can update your credentials on this page and you will have the option to test your connection and monitor the authentication status. Note that frequently logging in (using this button or by re-starting the plugin or removing & adding devices rapidly) could cause your account to be temporarily blocked. If this occurs, stop the plug-in and wait a few minutes before restarting it.

The “Config” page also provides control over plug-in behavior and logging output.

The polling interval (in seconds) specifies how often HS should login to the website and check the current settings. A value of 300 seconds (5 minutes) or higher is required.

The “Update Frequency” controls how much time must pass between update requests. These are specific requests outside of the polling window requested manually (via the “Update” button or script commands). A value of 15 seconds or higher is required. Requests made within less time than this will result in a “Waiting for update...” status temporarily, until the 15 seconds have passed.

For thermostats that do not support “Auto” mode, the Plug-in can simulate this capability if you enable it. If the Indoor Temperature is greater than the Cool Setpoint or lower than the Heat Setpoint, the operating mode will be changed automatically. You must maintain a 3-degree difference between Cool and Heat Setpoints.

Optional log data can be recorded in a stand-alone Plugin log (which can be found in the “Logs” directory of your Homeseer installation). Please note that this logging level should only be used when troubleshooting or sending in for support as it can have a significant impact on performance. This option also enables a special “Debug” menu item that may be helpful in diagnosing issues.

The “Download Log File” and “Clear Log File” buttons on this page make it easier to manage the plugin log files on your server, as you are no longer required to access the file system to get them when requested for support.

THERMOSTAT DEVICES

Once you’ve added your thermostat(s) to the plugin, the device(s) and all the initial features will be added to HomeSeer. After the first polling of the status occurs, a series of child devices will be created based on the capabilities of your thermostat.

Thermostat First Floor			
First Floor (148) ↓			Today 2:38:20 PM
Status (149)	Success		Today 2:40:04 PM UPDATE
Cool Setpoint (150)	74F	Today 2:34:14 PM	74F ↕ -1 +1
Heat Setpoint (151)	72F	Today 10:01:56 AM	72F ↕ -1 +1
System Mode (152)	Heat	1/15/2021 5:36:08 PM	AUTO COOL HEAT OFF
Operating Status (153)	Heating	Today 2:39:05 PM	
Operating Mode (154)	Heat	1/15/2021 5:36:08 PM	
Fan Mode (155)	Auto	1/15/2021 5:36:08 PM	ON AUTO CIRCULATE
Fan Status (156)	Off	1/15/2021 5:36:08 PM	
Indoor Temp (157)	72°F	Today 10:01:56 AM	
Outdoor Temp (158)	42°F	Today 2:39:05 PM	
Outdoor Humidity (159)	43%	Today 2:09:11 PM	
Hold Type (160)	None	Today 10:01:56 AM	NONE TEMPORARY PERMANENT

The “Status” device shows the status of the last request or command and tracks the last data refresh date/time.

The “Indoor Temp”, “Indoor Humidity”, “Outdoor Temp”, and “Outdoor Humidity” devices are status-only displays of the data last reported at the thermostat’s location and are included based on your thermostat’s capabilities.

The “Fan Mode” shows what the setting is (“On” or “Auto”) and provides control buttons to change the mode.²

The “Fan Status” device indicates whether the fan is actually running at this time or not (“On”, “Off”).¹

The “Cool Setpoint” and “Heat Setpoint” devices shows what the current setpoint is. It provides a dropdown of valid values to adjust the setpoint for the current mode, as well as +/-1 adjustments (or +0.5/-0.5 for Celsius). If the device is currently in a Permanent Hold, that hold will be maintained, otherwise a temporary hold will be issued if your thermostat supports such a capability.²

The “Hold Type” device shows whether the thermostat is following the schedule (“None”), in a Temporary Hold (“Until HH:MM”) or a “Permanent” hold, depending on capabilities. Buttons are provided to change the type of hold in place.²

The “System Mode” shows what the setting is (“Cool”, “Heat”, “Emergency Heat”, “Auto” or “Off”, as appropriate to your thermostat model) and provides control buttons to change the mode². If you have enabled the “Simulate Auto” option, an “Auto” mode button will be added even if your thermostat doesn’t support it natively, and switching will be handled by the plug-in if the temperature exceeds the cool setpoint or drops below the heat setpoint.

The “Operating Status” is an indication of whether the system is currently running or not (“Idle”, “Heating”, “Cooling”), and the “Operating Mode” device that shows the mode the unit is currently working in when Auto (or Simulated Auto) is used.

COMMAND PROCESSING

In an effort to prevent excessive commands from being sent to Honeywell, when an update is requested, the plugin checks the timestamp of the last requested update for that thermostat and if it’s too soon (based on “Update Frequency”), it sets a timer to wait until the “Update Frequency” has passed, then requests the update. Any polling timers are stopped and restarted each time an update occurs, so if you change the setpoint (which also requests an update), the next polling won’t occur for the specified number of seconds (“Polling Interval”) regardless of how long ago the last poll occurred.

SUPPORT

Support for the skWare Honeywell WiFi Thermostat Plug-In for HomeSeer is provided through the standard HomeSeer channels. The primary mechanism is via the [Honeywell WiFi Thermostat forum](#) on the HomeSeer website. The author can be contacted directly at steve@skware.net.

APPENDIX 1: FILES

The following files are used by the Plug-In. Directories in bold are part of the standard HomeSeer installation. Files marked with * are created by the software during usage; all other files are included in the installation.

<HomeSeer Installation Directory>

```

HSPI_SKWARE_HW_WIFI_TSTAT.exe
HSPI_SKWARE_HW_WIFI_TSTAT.exe.config
\Bin
  \skWare
    \WiFiThermostat
      HtmlAgilityPack.dll
      log4net.dll
      Newtonsoft.Json.dll
      skWare.Common.dll
      skWare.Common.HS4.dll
      skWare.Common.HS4.dll.config
      skWare.HomeSeer.WiFiThermostat.Core.dll
      skWare.HomeSeer.WiFiThermostat.Core.dll.config
\Config
  HSPI_SKWARE_HW_WIFI_TSTAT.ini*
\html
  \WiFiThermostat
    Debug.html
    debug_list.html
    Help.html
    Settings.html
    Setup.html
    skWare Honeywell WiFi Thermostat Plug-In User Guide.pdf
    skware_common.js
    thermostat_list.html
    Thermostats.html
  \images
    auto.png
    auxheat.png
    cool.png
    failed.png
    fan-auto.png
    fan-circulate.png
    fan-off.png
    fan-on.png
    heat.png
    humidity.png
    nostatus.png
    off.png
    permanent.png
    schedule.png
    success.png
    temporary.png
    thermometer-cool-0.png
    thermometer-cool-1.png
    thermometer-cool-2.png
    thermometer-cool-3.png
    thermometer-cool-4.png
    thermometer-cool-5.png
    thermometer-generic-0.png
    thermometer-generic-1.png
    thermometer-generic-2.png
    thermometer-generic-3.png
    thermometer-generic-4.png
    thermometer-generic-5.png
    thermometer-heat-0.png
    thermometer-heat-1.png
    thermometer-heat-2.png
    thermometer-heat-3.png
    thermometer-heat-4.png
    thermometer-heat-5.png
    unknown.png
    waiting.png

```

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\Logs

HSPI_SKWARE_HW_WIFI_TSTAT.log*