Control4 Operating System (OS)
Release Version 2.5.0
Release Notes
About Control4®

Control4, a leading provider of the operating system for the smart home, delivers intelligent control of consumer electronics products, appliances and networking systems through an easy-to-use and intuitive software interface. Founded in 2003, the company delivers affordable automation and control of lighting, music, video, HVAC, security, and energy management systems to the broad market through more than 1,600 custom integrators, retail outlets, and distributors in over 65 countries. Control4 is the platform of choice for major consumer electronics companies, hotels, businesses and utilities that require an intelligent, open and affordable control solution. For more information visit www.control4.com.

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1. Introduction

This latest Control4® Operating System Release 2.5.0 (also known as OS 2.5.0) is a great new release. We are delighted to introduce two new lines of lighting products: New Generation Wireless Lighting and Panelized Lighting products that will take you into the future of advanced lighting. Also available is the new Wireless Music Bridge which lets your customers choose their favorite streaming audio to a zone from their smartphones or tablets that support AirPlay®, Bluetooth®, or DLNA®. What’s more, we have some new tools to help dealers with day-to-day maintenance and deployments. Check out all of the new and improved features of OS 2.5.0 in this document.

1.1 New Hardware to OS 2.5.0

OS 2.5.0 supersedes all previous updates to the Control4 system. This release is recommended for new customer installations, as an upgrade path for existing customers, or for customers who have had problems with earlier releases that may now be resolved.

1.1.1 Next Generation Wireless Lighting

The next generation of wireless lighting controls showcases elegant industrial designs in a wide range of colors and custom configurations to provide the most comprehensive and time-saving wireless lighting solutions ever offered by Control4. New features and capabilities include backlit engraving, configurable keypads, a combination keypad/dimmer, fan-speed control, support for 277V installations, and more. The Next Generation Wireless Lighting products supported in OS 2.5.0 are:

- Adaptive Phase Dimmer (120V, 240V, & 277V)
- Forward Phase Dimmer (120V)
- Keypad Dimmer (120V, 240V, and 277V)
- 0-10 Volt Dimmer (120-277V and 240V)
- Configurable Keypad (120-277V and 240V)
- Auxiliary Keypad (120-277V)
- Fan Speed Controller (120V)
- Switch (120-277V and 240V)
- Faceplates

1.1.2 Panelized Lighting

Note that the products listed below were originally released in OS 2.3 for project planning purposes. OS 2.5.0 must be used to install and configure these products. Do not use OS 2.3 to install a project using any of the Panelized Lighting devices.

- 2-Slot Panel
- 5-Slot Panel
- 8-Channel Dimmer
1.1.3 Wireless Music Bridge
Now you can control and stream music from your handheld Apple® iPod®, iPod touch®, iPhone®, iPad®, Windows, or Android smartphone to one or more rooms in a Control4 system. The Control4 Wireless Music Bridge lets you and your family play your favorite Internet radio stations and music services, such as Pandora®, Spotify®, Rhapsody®, and much more, through a single zone from a Wireless Music Bridge (purchase a Wireless Music Bridge for each room in the home to bring separate streams of music to the whole house). The Wireless Music Bridge connects to a Control4 4-Zone Amplifier or 8-Zone Amplifier (Multi Channel Amplifier) or locally-powered speakers.

1.1.4 Licensing
Control4 will no longer offer the Intercom, MyHome Device and MyHome Site licenses for purchase effective June 1, 2013. The HC-800 (C4-HC800-BL-1) and HC-250 (C4-HC250-BL-1) now ship with included support for Intercom and MyHome Site without the need to apply licenses. For more details, see the Control4 email announcement sent to all dealers on May 28, 2013 or talk to your Control4 ISA.

1.2 New Software Tools for Dealers
The Composer Pro and Control4 back-end web services have been upgraded to improve your ability as a Control4 Dealer to configure and reconfigure customer systems.

1.2.1 Driver Search
The Driver Search interface has been improved to let you easily find the driver for which you are looking. Improvements include:

- Full-text indexing of most driver fields (name, model, creator, manufacturer, and so on) allows dealers to enter information in the search field and get quick results.
- Driver search is not constrained to displayed field types or filters.
- Predictive type-ahead entry of search terms.
- Search across local and Online Driver Databases at the same time or separately.
- Select Info... (right click on the search result) to get additional information about the driver, including version and creation/modification dates.
- Select Download Driver (right click on the search result) to download a driver from the Online Driver Database to your local drivers directory without adding it to the current project.
- Use Device Type and Manufacturer filters to expand search results.
1.2.2 Controller and Mesh Replacement

Now you can easily reconfigure the ZigBee™ mesh and change the ZAP Coordinator without recommissioning the ZigBee devices on the mesh. Prior to OS 2.5.0, if you wanted to replace the ZAP Coordinator, you were required to force all devices off the mesh and then rejoin them to the new mesh. With OS 2.5.0, we now have automated this tedious process for you. This will enable you to reconfigure your mesh and/or replace a controller; but please be aware of the following:

- The entire system must be fully updated to OS 2.5 and all ZigBee firmware updates must be completed before proceeding with mesh re-configuration
- We strongly recommend that the controller currently serving as the ZAP Coordinator be online and operational at the time that the mesh reconfiguration is done. This enables us to clear the mesh parameters from that device. If for some reason this is not possible (for example, an RMA situation), you must ensure that the device is not brought back online at this location. If this were to happen, it is very likely that you would experience mesh conflicts.
- Even in an RMA situation, you should NOT remove the previous controller from the project until the mesh has been successfully migrated. If the controller that is the ZAP Coordinator is deleted from the project before the migration is completed, the ZigBee mesh information is lost and the mesh will need to be manually created and the devices caused to leave and rejoin the new mesh.
- To modify the mesh configuration:
  1. Select any controller in Composer Pro System Design view.
  2. Select Manage Servers.
  3. Choose the current ZigBee Server and select Modify.
  4. Ensure that the current and target controllers to run ZigBee Server and ZAP Coordinator are online and operational.
  5. Make your desired changes and click OK.
  6. It will take approximately 5-10 minutes for the ZigBee mesh to be reconfigured. Please be patient. The system needs to ensure that old coordinators and Zservers are shut down properly before attempting to bring up new coordinators and Zservers, especially if a slower device is involved (for example, HC-200, HC-300, HC-500).

1.2.3 ZigBee Signal Strength

To more easily determine the strength of the ZigBee network, we have provided the ability for you to determine the ZigBee device’s signal strength (an indicator of how well it can hear and talk to its neighbor).

- This information is displayed in the Network Tools, ZigBee Network interface using a 0 to 4-bar indicator.
- This information is displayed when a device joins the mesh by blinking LEDs on the device after joining.
  - 0 bars – won’t join
  - 0-1 bars – LED blinks red
  - 2 bars – LED blinks yellow

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○ 3-4 bars – LED blinks green

- Using the Network Tools, ZigBee Network interface, the dealer can cause all connected ZigBee devices to blink and show their ZigBee Signal Strength LED color for a set amount of time.

- When you identify devices that have inadequate signal strength, you can evaluate your options for strengthening the signal, which may include one or more of the following:
  ○ Change the location or add a ZigBee Access Point
  ○ Add additional neighbor device(s) to improve the routing path
  ○ Replace device(s)

**IMPORTANT!** Only the more recent Control4 lighting and keypad ZigBee devices will blink when the ZigBee Signal Strength is displayed. The original Control4 lighting devices and keypads (those with mini-app images) will report their signal strength through Network Tools, but will not blink. Third-party ZigBee devices do not currently report their signal strength or blink.

### 1.2.4 Added a ‘Disconnect All ZigBee devices’ Option
Occasionally, it is useful to force all connected ZigBee devices to leave the mesh in an existing project. To make this easier for the Control4 installer, we added a **Disconnect ZigBee** button to the Connections view, Network tab in Composer Pro.

### 1.2.5 Composer Installation of Required Third-Party Software
Composer requires some third-party software libraries to function properly. The following changes apply to the installation of Composer 2.5.0.

- The MS Visual C++ 2005 redistributable will be automatically installed—this is required for the operation of Virtual Director.

- The MS Visual C++ 2012 redistributable will be automatically installed—this is required for the operation of certain capabilities of Composer.

- .NET 2.0 is no longer required for the operation of Composer Pro 2.5.0. We no longer check for and prompt for the installation of .NET 2.0.

- .NET 4.0 is required for the operation of Composer Pro 2.5.0. We check for and prompt the Control4 Installer to install this required software before we allow Composer Pro 2.5.0 to be installed.

- MS Reporting 2012 redistributable is automatically installed—this is required for the lighting and keypad reports.

### 1.2.6 Added the Ability to Sort Alphabetically to Various Existing Agents
To improve the ability for the dealer to maintain systems, we added the ability to alphabetize entries in the following agents: Announcement Agent, Custom Button, Lighting Scenes, and Wakeup. All other agents already have the ability to alphabetically sort items.
1.2.7 Keypad Engraving Report and Export Engraving Order

In OS 2.5.0, the engraving for the Next Generation Wireless Lighting and Wired Keypad products can now be entered into Composer Pro when setting up the system. Once entered, a Keypad Engraving Report can be printed and reviewed with the customer. After approval, the engraving order can be exported to an XML file (Export Engraving Order) and uploaded to the Control4 online store. (Dealers outside the U.S. and Canada: please contact your distributor or inside sales representative (ISA) to determine the proper process for processing engraving orders.)

To generate the Keypad Engraving Report or export the order file, click on the Tools menu and select Reports. In the Reports window, select either Keypad Engraving or Export Engraving Order. See the Composer Pro User Guide for details.

1.2.8 Lighting Defaults

The next generation Lighting Defaults section in the main project Properties pane in Composer Pro makes it easy to configure default button LED colors and Panelized Lighting modules settings one time, and have every new device added to the project inherit those settings. This provides an enormous time savings in situations where most every device in the project is going to use different LED color settings than the defaults defined by Control4.

Adjusting the Panelized Lighting module settings in the defaults helps to ensure that you don’t forget to change a voltage or breaker setting for one module and end up with incorrect wattage calculations.

1.3 Maintenance and Improvements

OS 2.5.0 includes some important defect fixes. The section below is not meant to be a comprehensive list, but a list of high-priority fixes about which we felt you should be aware. These are issues that were found in previous releases.

1.3.1 Important Bug Fixes after OS 2.4

- Fixed a memory leak that was found while using Tuneln
- Fixed a bug where NTP only performs a gross time sync when you first update your system
- Fixed an issue where remotes could receive a “low battery warning” at times when the battery wasn’t low

1.3.2 Sony STR Updates

The Sony® STR Receiver may be updated to an OS 2.5.0-based Sony software release available from Sony’s update server. This update will include some minor bug fixes, but mostly is required to align with Control4’s OS 2.5.0 release. Specifically, MyHome Anywhere Access will now work on Sony STR Receivers that have upgraded to OS 2.5.0-based software.
The Sony STR Receiver will lag the Control4 update process by fewer than two weeks. This time is needed for Sony to populate the build on their update server. Remember that the Sony STR Receiver is updated separately from the rest of the Control4 system (explained in Support Knowledgebase Article 745).

1.3.3 4-Zone Amplifier and 8-Zone Amplifier Firmware Updates

A new firmware update to the 4-Zone Amplifier and 8-Zone Amplifier (Multi Channel Amplifier) has been added to this release. This firmware improves the robustness of the amplifiers by decreasing inter-channel cross-talk. This consequently decreases heat dissipation in the amplifier which improves product longevity.

1.4 Firmware Updates

Below is a list of the firmware numbers that have changed in OS 2.5.0.

NOTE: The table below will be filled in as soon as we have the final versions.

For a full list of firmware versions prior to 2.5.0, please see Support Knowledgebase Article 481.

<table>
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<tr>
<th>Control4 Devices</th>
<th>Firmware Version</th>
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<tr>
<td>Dock for iPod (C4-IPDFFT1-E-B)</td>
<td>00_03_22</td>
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<tr>
<td>Audio Matrix Switch V2 (C4-16S2-E-B)</td>
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<tr>
<td>Multi Channel Amplifier (C4-16AMP1-B)</td>
<td></td>
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<tr>
<td>Multi Tuner V2 (C4-TUN2-E-B)</td>
<td></td>
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<tr>
<td>LCD Keypad, Ethernet (KPZ-10B1)</td>
<td></td>
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<tr>
<td>Contact Relay Module</td>
<td>03.03.80_242</td>
</tr>
<tr>
<td>LCD Keypad, Wireless (KPZ-10B1)</td>
<td>03.18.76.2.5.0.220195-fw</td>
</tr>
<tr>
<td>Wireless Inline Dimmer (LDZ-IL51)</td>
<td></td>
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<tr>
<td>Wireless Puck Dimmer (C4-DM201-Z)</td>
<td>03.18.97_2.5.0.225195-fw</td>
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<td>Audio Matrix Switch V3 (C4-16ZAMSv3-B)</td>
<td>03.19.09_2.5.0.228189-fw</td>
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<td>4-Zone Amplifier V1 (C4-8AMP1-B)</td>
<td>03.19.19_2.5.0.229723-fw</td>
</tr>
<tr>
<td>Multi Channel Amplifier V2 (C4-16AMP2-B)</td>
<td></td>
</tr>
</tbody>
</table>
2. Notifications, Limitations, Warnings, and Workarounds

2.1 OS 2.5.0

- **Wireless Music Bridge and Default Room**—If you are running the Wireless Music Bridge output through your controller and you do not have a default room set up on the Properties page, you will have to manually select the Wireless Music Bridge though your Navigator for it to stream audio to the appropriate room.

- **Announcements and Switching HDMI Sources**—If you have an announcement that should play over HDMI (for example, to a TV), and you are watching another source (BD, DVD, satellite) on the TV, the announcement will play, but the path won’t switch back to the source you were watching. The workaround is to configure a popup on the controller in addition to the audio announcement. This forces Control4 to change the audio AND video source to play the announcement, and they will both be switched back after the announcement so the user can seamlessly continue to watch their original source.

- **USB Restores on controllers**—Control4 has always recommended that dealers use the same version of Composer as the OS version of Director when configuring a project. If you are using USB Restore or a Factory Image reset on a controller that will be running Director, you will want
to create the new project using the matching version of Composer and then update it to the most current version. Beginning with OS 2.5.0, Composer 2.5.0 will not be able to create and add controller drivers to projects with Director versions earlier than OS 2.2.1.

- **iTunes**—If you are using AirPlay in iTunes > Preferences, make sure you enable remote control of iTunes via AirPlay for iTunes to play music and podcasts through your AirPlay device.

- **Legacy Lighting Scenes versus Advanced Lighting Scenes**—Starting with OS 2.5.0:
  - It will not be possible to add the legacy Lighting Scenes agent to a project that does not already have one added to the project. The Advanced Lighting Scene agent should be used for all next generation lighting scenes going forward. Scenes created using the legacy agent will continue to work as long as the agent remains in the project. Note, though, that if you delete the agent from a project, you will no longer be able to get it back.
  - It will not be possible to manually add a next generation lighting device to the legacy (OS 2.4 or earlier) Lighting Scenes agent. Next generation lighting devices won’t appear in the list of lights that can be added to the scene.
  - If a next generation lighting device is already in a legacy lighting scene, it will continue to work. If you remove that light from the scene, though, you will not be able to add it back.
  - There is one case that will allow a next generation lighting device to be added to a legacy lighting scene. If you use the conversion tool to convert a legacy dimmer or switch to a next generation dimmer or switch and the legacy lighting device was in a legacy lighting scene, the conversion will put the next generation lighting device into the legacy lighting scene. We recommend that you convert your existing lighting scenes to advanced lighting scenes prior to performing device conversions.
  - The legacy Lighting Scene agent has a prominent message placed in it that encourages you to convert legacy scenes.

For a more comprehensive list of issues found in past releases and fixed in 2.5.0, see the following Knowledgebase article at: [http://kb.control4.com/questions/822](http://kb.control4.com/questions/822).

### 2.2 Prior Releases

- **Tuneln on Tatung v2 (10.5” In-Wall Touch Screen)**—If you have a Tatung v2 in your OS 2.5.0 project, you will need to hide Tuneln on the Navigator’s Listen menu. Since the Tatung v2 is a flash device, it will show Tuneln under the Listen Navigator menu. However, since its final version was OS 2.2.4, it won’t support Tuneln.

- **Old remote, new cover**—If you are ordering a Remote Recharging Station kit it is important to remember that a remote that has been used for a while will pick up oils from hands and will have a smoother texture. The color of the remote can also fade over time. Therefore, when you order a Remote Recharging Station kit, the back cover may seem to have a slightly different texture and slightly different color due to the back cover being new and the remote used.

  Also, when replacing the battery and cover using the Remote Recharging Station, the new cover has spring-loaded contacts that make it a tighter fit. Be sure to press firmly on both the back and top of the cover when snapping on the replacement cover. Instructions can be found in the Remote Recharging Station Setup Guide.

- **Devices with aggressive battery conservation**—It has come to our attention that some mobile devices, including the Android-based Sony tablets, have been optimized to manage battery use. In these devices, where an application requires a network connection to operate successfully, the device may cause the application to perform slowly, or in some cases “time out” while waiting for
the WiFi radio to connect to a WAP (wireless access point). When the MyHome app or others are in focus when resuming from standby, the application may give the appearance of not being able to connect to the system. This is because the WiFi radio connection is not fully established. In these cases, we recommend:

- Setting the MyHome application to use dedicated mode. This will keep the app up and in focus and try to prevent the device from dropping a network connection.
- Retry connecting to the Control4 system.

32 lighting scenes limitation for ZigBee lighting devices—The limitation of not allowing a ZigBee lighting device in more than 32 lighting scenes has always been present; however, in previous builds of the OS, that didn’t prevent you from adding a ZigBee lighting device to more than 32 scenes when setting up Advanced Lighting Scenes or while converting to Advanced Lighting Scenes. With OS 2.4 or later, if the OS detects that a ZigBee lighting device is in more than 32 scenes, the system will remove the ZigBee lighting device from the scene until it goes below 32 scenes. This shouldn’t be an issue, however, because the device doesn’t work in that scenario anyway. OS 2.4 or later prevents this problem by blocking the ability to add a ZigBee lighting device to more than 32 scenes. If a customer had lighting scenes that didn’t work correctly because of the 32 scenes limit, after the update the device may disappear from the scene. In this case, have your customer verify that the device is still in the correct scene.

Anywhere Access—In our testing, we became aware of two important issues that should be noted. First, routers on the Control4 approved router list should be on the latest router firmware. In some cases, approved routers failed to allow Anywhere Access connections when the router was running out-of-date firmware. Second, routers have inconsistent implementations of SIP ALG, a setting which causes issues with establishing connections with our Anywhere Access infrastructure. If Anywhere Access is not working, and your router supports SIP ALG, please disable the setting in the router. See your router’s documentation for help.

DHCP, MyHome apps, and Anywhere Access: Mobile—Beginning with OS 2.4, if the customer has 4Sight and MyHome, the MyHome apps are designed to automatically connect over the network where they can reach the controller. We recommend that a controller be set to a static IP address rather than use DHCP. This will ensure that the MyHome app can reach the controller on the local WiFi network. If the IP address for the controller changes after the initial system setup, the MyHome app can’t reach the controller at the IP address in the configuration. As a result, the app will automatically try to use a remote connection (such as, 3G/4G) even when in the local network and on the same WiFi network as the controller. This will leave the customer with a slower experience connecting to the system, and likely a delayed response in the Navigator due to network latency.

Speaker Point and Home Theater Controller may require a power cycle to complete an update—The Speaker Point is the most likely to experience this problem, but it has also been observed on other products sharing the same processor (such as, Home Theater Controller and Media Controller). Occasionally, the Speaker Point will not properly reboot itself after the update is complete even though we have made improvements in OS 2.3. If the power and data lights are lit (not flashing) and the device has not restarted, you may need to power cycle it. IMPORTANT! Do not power cycle the device if the data and link lights are flashing.

Windows PC running Composer must be rebooted after updating the system—After updating a Control4 system to OS 2.5.0 from any version prior to OS 2.1, the PC running Composer must be rebooted to remount the Samba file shares properly. Because the Samba server on the controller has been updated, the PC no longer recognizes the previously-loaded shares as valid. After the PC reboots, the shares will mount properly. This is important to understand if you are trying to load media or perform a full backup containing media after the update. These operations will not complete correctly until the computer running Composer is rebooted.
• **ZigBee devices not online**—If the ZigBee mesh is offline for an extended period of time, some ZigBee devices may go into “lost sheep” mode and not come online immediately. After updating the Control4 system to OS 2.5.0, verify that all the ZigBee devices are online so that they can be updated. If a device is offline for this reason, it can be brought online quickly by rebooting it or by using the standard Identify tap sequence.

• **Update stalled**—In spite of significant improvements to Update Manager, it’s still possible that a device will fail to update, especially when updating from a version prior to OS 2.1. This is because the first part of the update is handled by the update software already installed on the device. In the rare event that the update fails during the portion of the update that uses the existing software, it may be necessary to reboot the device or restart the update.

**One example**—is when the upgrade of a device stalls if the packages it requires do not exist on the primary controller. This can happen if the primary controller reboots before the secondary device finishes its update or the agent restarts the update.

  • This is normal update behavior for the prior version of Update Manager. While this is fixed in the new Update Manager (OS 2.x)—which looks in more places for the packages it needs—if the device hasn’t been updated, it won’t have that new capability.
  
  • You should be able to get things going again by opening the Composer Update dialog box, selecting **Cancel Update**, and then restarting the update. This will cause the agent to download the required packages again, and restart the update.

• **Thermostat schedule may not be correct after firmware update**—This applies primarily to systems updating from any version prior to OS 2.1. Please check the Control4 Wireless Thermostat’s stored schedule after the system has been updated to OS 2.4 or later and that the thermostat firmware has been updated to 03.17.56_2.4.0.219532-fw or later.

• **Media export includes playlists**—The Composer Media Manager export function always includes playlists. If you import multiple exported media files, you will have multiple copies of the playlists included. These extra playlists can be deleted manually in Composer.

• **Composer Pro requires .NET Framework**—If installing Composer Pro on a new computer, you must also install .NET Framework 2.0 and 4.0.

• **Wireless Thermostat setpoint +/- programming**—If you’ve used the HEAT_SETPOINT or COOL_SETPOINT thermostat variables to programmatically increment or decrement the current setpoints, be aware that these variables are in 0.1 Celsius integer units. You’ll need to add or subtract accordingly to obtain the desired real setpoint changes.

• **HC-200/HC-300/HC-500 bootup from backup partition**—Occasionally, Home Controllers HC-200, HC-300, or HC-500 are unable to boot up from the active boot partition. If this happens, the device fails over to a recovery partition. The recovery partition allows the device to boot up and become operational. The device version will show up as 2.0.0.0 when this happens. Some non-essential system packages, including Navigator, are not loaded on the recovery partition. The device will need to be updated to OS 2.3 or later to load these packages.

• **Composer error on startup**—When starting Composer Pro, an error message of the form:

  2010-05-19 09:42:28,119 [5732] WARN Control4.Client.ConfigDataManager - The file 'driver file name' has an improperly formatted version tag. The driver will still be loaded but there may be problems with updating this driver until the problem is fixed.

means that you have a DriverWorks driver in your project using a non-integer in the version field. The driver will continue to function, but it will not update when using the “Update Driver” function. The driver needs to be replaced manually.

• **Using page flips via programming on an on-screen device**—If you use page flips, you need to take into account the power state (on/off) of the display device (TV or projector) and whether it
is being used for something else (TV, movies). Turn it on (if off), and select the controller as the source device (enabling the path to the on-screen Navigator) via programming. When you are done with the page flip, you’ll need to turn off the device as needed so that you don’t leave TVs or projectors turned on unnecessarily.

- **Use of ‘The’**—The Control4 interface and media database ignore ‘The’ in the sorting and presentation of albums and movies by Title; however, Control4 includes ‘The’ when sorting and presenting artists.

- **On-screen-resolution display**—Control4 has chosen not to implement an on-screen Navigator interface for 4x3 (Standard Definition - SD) resolution-display devices. Control4 scales the 16x9 interface for display on the SD device. This comes with the following limitations:
  - The font and image size of many interface elements may not be optimal.
  - The IP camera display buffer is not scaled and will not “fit” correctly if used on an SD display device.

- **USB Restore**—If you need to restore a Mini Touch Screen, Speaker Point Rev A, Media Controller, or Home Theater Controller using a USB stick, you’ll need to use the 1.7.4 version of the USB Restore utility. Speaker Point, Rev. B must be restored to OS 2.2.1 or later; it will not restore from 1.7.4.

- **WEP and WPA**—Control4 WiFi devices that support WEP and WPA allow for the entry of ASCII keys in the network configuration interface. However, the Control4 implementation of WEP is restricted to hexadecimal keys. You can use ASCII keys for WPA networks, but you must use HEX keys for WEP network configurations.

- **Wireless Thermostat**—When connecting to a release 1.7.4 or a release 1.8.2 system with a Control4 Wireless Thermostat with Composer 2.1, you will receive a message that the Wireless Thermostat driver failed to initialize. You can ignore this message. After the system updates to OS 2.3, the drivers needed by Composer will match those used by the system.

- **The Audio driver on Control4 devices only supports sample rates of 7200 – 48000 bits/second**—Control4 will not attempt to play any stored digital audio files with a higher sample rate. The files will scan and show up in the media database, but they will not play. If this situation occurs, an error in the audio log (if enabled) will indicate that the sample rate is too high.

- **Performance of FLAC audio streaming**—It is possible to require more CPU when streaming multiple FLAC files than what the Home Controllers HC-200, HC-300, or HC-500 can deliver. On these controllers, Control4 can only stream up to two (2) FLAC files concurrently. If you anticipate the need for more, use an HC-1000 as the primary controller. FLAC format support is limited to 16 bits/sample at the following supported sample rates: 8kHz, 11.025kHz, 12kHz, 16kHz, 22.05kHz, 24kHz, 32kHz, 44.1kHz, 48kHz.

- **The ZAP Coordinator cannot be replaced without re-creating the mesh**—The security parameters of the ZigBee Pro mesh are maintained by the ZAP Coordinator. Control4 does not currently have a solution for replacing the coordinator without requiring the mesh to be re-created and the devices to be rejoined. Because the ZAP Coordinator can’t be changed, it won’t show up in the list of ZAPs to avoid inadvertent changes.

- **ZigBee mesh is down when the ZAP Coordinator is not running**—The ZigBee Pro mesh requires that the controller defined as the coordinator is available and running ZAP. If not, the mesh network will be down until the coordinator is available.

- **Lighting scenes limitations**—Each device can be included in up to 32 total scenes, and the project can have up to 256 total scenes. If you try to add a device that has reached its maximum number of scenes, the system not will allow you to—whether the device is online or not—and you’ll get a warning message in Composer Pro. When the system gets the error back from the device that it isn’t able to add any more scenes, it will remove the device from that scene and
open a dialog in Composer that will alert the installer to the problem (similar to the dialog that you get if you try to identify a device that's already identified within the project).

- **Non-routing devices and ZigBee Pro**—A maximum of six (6) non-routing devices can be added to the ZigBee Pro mesh without routing nodes. This limitation is unlikely to affect most deployments; however, the maximum number of non-routing devices (System Remote Controls or other "sleepy" devices) that can be joined to the front panel of a controller is six (6). To add more sleepy devices, add other routing nodes (dimmers, switches, or keypads) to the mesh.

- **Devices operating with MiniApp firmware**—These devices do not have the ability to be controlled by or provide status feedback to the Control4 system. The MiniApp firmware image is used only during the ZigBee update process. Devices being updated from EmberNet to ZigBee Pro and from one ZigBee Pro firmware version to another will run the MiniApp firmware version during the update process. After the device is updated to the full firmware image, it will resume normal operation.

- **Wireless Thermostat is not supported in a battery-only configuration**—With ZigBee Pro firmware, the thermostat does not conserve the battery by going to sleep. Control4 has always recommended that Control4 Wireless Thermostats be installed with a dedicated power source (common wire) whenever possible, and if that isn't possible, to utilize a power-stealing configuration with two (2) relays. Control4 has never recommended that the Control4 Wireless Thermostat be installed in a battery-only configuration. However, if you have installed the thermostat in a battery-only configuration, be aware that the ZigBee Pro firmware for the thermostat does not conserve the battery by putting the thermostat to sleep. This is not an issue for devices that have common power. It should work just fine with supported power-stealing configurations. However, if a thermostat is configured for power stealing on a heat-only or cool-only system, it will use too much battery power and require frequent battery replacement.

- **During the startup phase, ZigBee Server has to assume that all devices on the mesh are battery powered**—This assumption results in the address table on the ZAP’s front panel getting filled up very quickly, since it is limited to eight (8) slots. After each device reports that it is routing devices, the entry times out and then a slot is made available. This affects devices (such as the Black and Decker ZigBee Door Lock and battery-powered devices from CardAccess) that need to use a slot in the address table on the front panel. After the mesh comes up and stabilizes, these devices can participate in the mesh. It can take up to 20 minutes for a 70-node mesh network to stabilize. During this period of mesh stabilization, these battery-powered devices may not work correctly.

- **Synchronization of lighting scenes**—Synchronization of lighting scenes occurs in the background after the scene is created. If a change is made to an existing scene, the installer will have to force synchronization on that scene if they want the changes to take effect immediately (Director will automatically check for synchronization on each lighting device every 12 minutes). To force synchronization of one particular scene, use the Sync this Scene button. To force synchronization of all scenes, use the Sync All Scenes button. **Note:** “Sync All Scenes” will slow your ZigBee network for a while until every device in every scene has been contacted and brought fully up to date. As a rule of thumb, wait five (5) minutes or so after using Sync All Scenes before attempting to test or expecting ZigBee performance to return to normal.

- **Automatic channel changing**—Control4 has not implemented automatic channel changing in the ZigBee Pro implementation. The only scan Control4 does is on the first deployment. If you want to change the channel, you’re welcome to, but Control4 recommends that you wait until the system is stabilized—with no updates underway—and all devices are online. The channel-changing process entails Network Manager (ZigBee Server) notifying all nodes that the network is changing to a new channel. The devices acknowledge this and change to the new channel. If you do this with devices offline or updating, they can become lost. Eventually, they should find their way to the correct channel, but it can take a while.
• Images used in the Announcement agent and in the web images from the camera driver should be no larger than 300 KB—The display of images in the Announcement agent and the display of web images through the web images camera driver are designed to work with small images commonly used on websites or in graphical user interfaces. The recommended size for these images is 300 KB or less. Larger images will be scaled to the required size for the Navigator, but this scaling process for very large images can cause problems, such as a Mini Touch Screen restarting.

• Deleting an agent configuration may not delete all associated programming—When deleting an agent, confirm that all associated programming is also deleted. You may need to delete some elements of associated programming manually.

• Streaming an analog source from audio input on a controller to a WiFi Audio Endpoint is limited to one (1) stream—Audio signals that are processed through the analog input on a controller are processed as a PCM stream and require much more bandwidth than streaming an MP3 to a WiFi Audio Endpoint. In this configuration, Control4 recommends that only one (1) stream be used at any one time.

• Static on audio output—As a reminder, occasionally when using the Home Theater Controller, Media Controller, Mini Touch Screen or Speaker Point as an Audio Endpoint, the devices will output static from one (1) or both of the audio outputs when music plays. This can be resolved by power cycling the device. The Mini Touch Screen’s click sound also may play very loudly, and sound very harsh. This is caused by the same root problem; power cycling the device will resolve it. Note: The devices need to be unplugged and not just rebooted for the audio device to reset properly.

• Cannot register a controller with a ‘.’ (period) in the name—Due to network device naming conventions, it is not possible to register a controller successfully if it has been configured with a period ‘.’ in the controller’s name. Control4 advises dealers to avoid this naming convention.

2.3 Questions about OS 2.5.0 and Earlier

Here are some common questions related to OS 2.5.0.

2.3.1 Do I need to update my customers to OS 2.5.0?

While it is not necessary for you to update your customers’ systems to OS 2.5.0, we highly recommend that you update to this latest release to benefit from the latest changes and additions. We also recommend that you update customers who are experiencing problems with their prior release.

As with prior OS releases, Control4 recommends that dealers first familiarize themselves with OS 2.5.0 in their own home system and test systems. After gaining an understanding of the full product, including ZigBee Pro and the update procedures, you can make an informed decision about which of your customers might benefit from an update to OS 2.5.0.

If your customer is running 1.7.4, 1.8.2, or a prior version, you’ll want to make sure you understand the performance changes in OS 2.1 and plan for that in the upgrade. This may require adding another controller to distribute system processes. You can use the Balancing Size and System Usage Requirements and System Size Usage Modeling –
Performance Calculator technical bulletin on the Control4 Knowledgebase to assist with this evaluation.

### 2.3.2 Which version(s) of Composer do I need for OS 2.5.0?

Composer 2.2 is required to install and update systems to OS 2.5.0. It is not backwards compatible with prior versions of Control4 system software. If you are making changes to a prior version before this update, please use the corresponding Composer version based on the installed system version.

Using Composer 2.5.0, you can connect to a system running a previous version of software, but you should not modify the system.

You can have multiple versions of Composer installed on the same computer at the same time. If you have customers running prior versions of software on their systems, the corresponding versions of Composer must be used for maintenance and configuration work for those systems:

- Use Composer 2.5.0 for any OS 2.5.x system changes
- Use Composer 2.4.0 for any OS 2.4.x system changes
- Use Composer 2.0.6 for any OS 2.0.x system changes
- Use Composer 1.8.2 for any OS 1.8.x system changes
- Use Composer 1.7.4 for any Release 1.6 or 1.7.x system changes

Customers who have purchased Composer Home Edition (Composer HE) must update their software to obtain the new capabilities of OS 2.5.0. The Composer HE software for all supported OS versions is available via the customer’s personal Control4 account.

### 2.3.3 Can I continue to install prior release systems?

Control4 may ship hardware with previous versions of the OS pre-installed, and you may certainly install these systems using the bundled OS version. However, because of the significant improvements with this release, we recommend that the system be upgraded to OS 2.5.0 before turning the system over to your customer. This is the most current and the best-supported OS for Control4 systems.

### 3. Upgrading to OS 2.5.0

Follow the recommendations in this section if you have an older system that uses EmberNet and that you want to upgrade to ZigBee Pro with the latest release.
3.1 Update Recommendations for Existing Systems

IMPORTANT! (1) The OS 2.5.0 release utilizes ZigBee Pro for ZigBee RF communications. Controllers and ZigBee firmware devices upgraded to OS 2.1 or later cannot be downgraded to Release 1.7.4 or prior versions. (2) A few legacy products are not supported in OS 2.5.0. Other products are supported, but may have limited functionality or may not provide access to new capabilities.

Control4 recommends that customer systems running OS 2.0.x or 2.1.x be upgraded to OS 2.5 if they need any of the improvements included in this release.

1. Control4 recommends that customer systems running Release 1.8.2 be upgraded to OS 2.5. Control4 no longer provides any support for OS 1.8.2.
2. Control4 will continue to support Release 1.7.4 for existing customers for a limited time.
   • Please use Composer 1.7.4 to manage projects running on Release 1.7.4. Other versions of Composer may introduce incompatible drivers or project settings.
3. Control4 no longer provides support for versions of software prior to 1.7.4. We recommend that these systems either be left “as is” or be upgraded to Release 1.7.4 or to OS 2.5.0.
   • Control4 will not provide new or replacement hardware products for prior versions.
   • Customers may continue to run prior versions for as long as they want. However, Control4 Technical Support has limited ability to answer questions and provide assistance for older product releases.
   • Release 1.3.2.442 was the final release of the Release 1.3.x product line. While Control4 doesn't actively support this release, it is the best/final release of this line and may be considered as an option for customers who are using a Home Theater Controller or a Media Controller as the primary controller within their system.
   • Customers’ systems running Release 1.6.0 or any 1.7.x release should be upgraded to Release 1.7.4 or to OS 2.5.0.

IMPORTANT! OS 2.5.0 is a complete system software release. All supported Control4 devices will receive new software or firmware. The update process will affect all devices in the Control4 system.

3.1.1 ZigBee Pro

Control4 has been utilizing ZigBee Pro for ZigBee RF communications since the release of OS 1.8 in August 2009. If you are updating a customer from version 1.7.4 or prior, they will have ZigBee devices running the older ZigBee protocol. These systems can be updated all the way up to OS 2.5.0; however, special instructions apply. Please see Composer Pro Software Release Update Instructions – 1.7.4 to 2.0 on the Control4 Knowledgebase for more information.
3.1.2 Software License

In conjunction with the OS 2.0 release, Control4 introduced a Software License. All new controller hardware product purchases include a Software License. This same license applies to OS 2.5.0. Customers who have systems purchased prior to OS 2.0 can purchase a software license for OS 2.5.0.

- The Software License is an electronic license purchased by the Control4 Dealer using their my.control4.com dealer account credentials or through the standard purchase order process.
- A dealer must purchase and assign a license to the customer’s Control4 account (to which the system is registered) to upgrade prior-version systems to OS 2.5.0. If an upgrade is to be performed immediately after adding a license, the dealer should perform a “Check In” using Composer Pro (Tools > Account Services).
- Customers who have previously updated their systems to any OS 2.x version will have the needed license to update to OS 2.5.0.
- Control4 provides a no-charge OS 2.x license for controllers shipped on/after December 23, 2009. No paperwork or manual approval is required to receive the no-charge upgrade. To receive the no-charge upgrade, the eligible controller must be the primary controller for the Control4 system. During the upgrade process, Update Manager will check the MAC address of the primary controller. If it is in the Control4 list of controllers shipped on/after December 23, 2009, the upgrade will proceed without requiring a software license.

3.2 Quick Reference to the OS 2.5.0 and Later Upgrade Process

- The upgrade to OS 2.5.0 and later follows the same essential process that prior upgrades have followed, with a few basic exceptions which are called out here. The following description is a quick reference and doesn’t go into detail in many areas. See the referenced documentation for additional information.
- Customer systems that are on Release 1.8.2 or any OS 2.0.x release can be upgraded to OS 2.5.0 and later using Remote Access. However, Control4 recommends that you become comfortable with the OS 2.5.0 upgrade procedures by performing several upgrades on-site before you decide to use Remote Access.
- Customer systems that are on Release 1.7.4 or prior releases can’t be upgraded remotely because the dealer or installer must be physically present to join ZigBee devices to the mesh network.

3.2.1 Pre-work Prior to Arrival at the Customer’s Location

1. Ensure that Composer Pro for OS 2.5.0 and later has been installed and activated on the installer’s laptop or PC. Internet connectivity is required for activation for first-time installations.
2. Internet connectivity is required on-premise for upgrading from OS 2.0.x to OS 2.5.0 and later. Because the OS 2.0.x release did not support USB Install, the primary controller must first be updated to OS 2.4 using either the USB Restore or using
Update Manager with an Internet connection. After the primary controller has been updated to OS 2.5.0, the USB Install for OS 2.5.0 can be used to update the remainder of the devices on the system. Ensure that Internet connectivity is available or plan for temporary Internet connectivity during the time the upgrade is performed. You can then upgrade the system to OS 2.5.0.

If you plan to use the USB Install for OS 2.5.0 to upgrade to OS 2.5.0 from any version other than OS 2.0, create the USB Install stick and load the license information needed to complete the update. This requires Internet access, the type of the primary controller, and the MAC address of the primary controller.

3. **Make sure you understand the upgrade path based on the current version installed on the customer’s system.** For prior version upgrade support, see “Validated Upgrade Paths for OS 2.5.0.”

4. **If a software license is needed, use your dealer account** on my.control4.com to assign the license to the customer’s account.

5. **If updating from Release 1.7.4, 1.8.2, or a prior version** make sure you understand the impact that the new operating system and ZigBee Pro will have on devices in the system. You may need to sell replacement or additional hardware to make the system work correctly.

### 3.2.2 Upon Arrival at the Customer’s Location

1. Connect to the Control4 system using the appropriate version of Composer Pro for the system that is currently running.
   a. Ensure that all IP and ZigBee devices are identified and online.
   b. Ensure that all system programming is working as it should prior to beginning the update.
   c. **Make a backup of the Control4 system in Composer Pro prior to beginning the update.** This backup should be named so that you can find it later if needed.

2. (Optional) Make sure that the customer’s media collection is backed up. Whether the media is stored on a Control4 controller hard drive, a USB drive, or a network-attached storage device, it is subject to loss if the storage device fails. Control4 doesn't provide backup solutions for data storage, but recommends that you ensure that customers use a backup solution.

3. Connect to the Control4 system using Composer Pro 2.5.0 (or later) to initiate the upgrade to OS 2.5.0 and later, and then use Update Manager to begin the update process.

4. If updating from a version prior to OS 2.0.x, be aware of the following:

   The Composer Pro upgrade wizard will give you the opportunity to convert the media database and write metadata to id3 tags in MP3 files.
   a. The OS 2.x media scanning process allows Control4 to synchronize the media database with changes made by a third-party media manager (for example, Media Monkey, Apple iTunes, or Microsoft Media Player). This is done using the id3 tags embedded in the files.
   - If you believe the Control4 media database has the most correct/current information about song metadata, you can write this information to the MP3 file
tags at this time (the storage device has to be online and writeable). If you don’t write the metadata to the tags and then scan, the information in the media database will be replaced by the information in the tags when the media is scanned.

- If you believe the media tags are more correct or current than the Control4 media database, you should not write the metadata from the media database to the tags.

b. The OS 2.x system uses a different media database format than 1.7.4, 1.8.2 and prior versions. You must convert it when you upgrade the system. If you choose not to convert it, the media database will be deleted and can be repopulated by scanning.

- The 10.5" Wireless Touch Screen V2 operates at a different resolution. During the upgrade process, the wizard will look for the Photo Screen Saver storage location and automatically scale all screen saver images for the new resolution.

5. Monitor the update progress of the IP devices using Update Manager.

6. If updating from a version prior to OS 2.0, after the touch screens have been updated (those that support the Flash Navigator, not including the latest capacitive 5" or 7" In-Wall Touch Screen with Camera, 7" Portable Touch Screen with Camera, and so on) they will prompt for recalibration prior to use.

7. After the primary controller has been upgraded to OS 2.2 (or later), the ZigBee Pro devices will begin their update automatically.

a. For Release 1.7.4 or prior version systems, an update of all ZigBee devices to ZigBee Pro is required. Refer to the ZigBee Pro Upgrade Instructions, Composer Pro Software Release Update Instructions – 1.7.4 to 2.0 on the Control4 Knowledgebase or in Support > Documentation on www.control4.com if you are not familiar with this procedure.

b. For OS 1.8.x systems and OS 2.x systems, the update to the latest ZigBee Pro firmware versions will happen automatically and will not require user intervention. Please be aware that while firmware updates are in progress, ZigBee performance will be sluggish and devices in MiniApp mode will have limited functionality.

8. At the conclusion of the update, reboot the PC running Composer Pro to ensure that the Samba mounts to the controllers are current.

9. **Back up the project.** After completing the update, make a backup file of the Composer Pro project. Give it a name that distinguishes it from the pre-upgrade backup. If you ever need to restore this system, having a current backup will save you a lot of time and effort.

### 3.3 Validated Upgrade Paths for OS 2.5.0

#### 3.3.1 Primary Controller/System Upgrades

- Controllers running system versions earlier than Release 1.2.x may not be able to retain their project through an update.

- Any Release1.2.x or prior version system (primary controller and devices) must be updated to Release 1.3.2. The update server automatically updates them to Release 1.3.2.234. Then they can be updated further, but it's a multiple-step process.
• Any Release 1.3.x system can be updated to Release 1.6 or to any Release 1.7.x. The system can be updated further afterward, but it's a multiple-step process. Home Controller HC-300s being updated will have their internal memory repartitioned. The installer must save the project and restore it after the update is completed, because the project will be lost when the device is repartitioned.

• Only systems running Release 1.7.4 or later can be directly updated to OS 2.5.0 and later.

3.3.2 Secondary Device Upgrades

• A Home Controller HC-300 functioning as a secondary controller needs to be updated to Release 1.6 or Release 1.7.x. This allows Control4 to repartition the internal memory.

• All other secondary controllers (Release 1.3.x or later) can be updated directly to any upstream version as long as they're added to a project with a primary controller that is running the correct version.

3.4 Residential Software Product Releases

<table>
<thead>
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<th>Control4 Software Releases (From Inception)</th>
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<tr>
<td>Release 1.x.x</td>
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<tr>
<td>Wednesday, July 06, 2005, 1.0.203.8 Initial Release</td>
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<td>Friday, September 02, 2005, 1.1.2.2 Maintenance Release</td>
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<tr>
<td>Friday, October 14, 2005, 1.2.0.90 Maintenance Release</td>
</tr>
<tr>
<td>Thursday, November 03, 2005, 1.2.2.6 Maintenance Release</td>
</tr>
<tr>
<td>Sunday, December 28, 2005, 1.2.3.43 WiFi Support</td>
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<tr>
<td>Monday, March 06, 2006, 1.2.4.48 Maintenance Release</td>
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<tr>
<td>Thursday, March 23, 2006, 1.2.4.50 Maintenance Release</td>
</tr>
<tr>
<td>Tuesday, May 30, 2006, 1.2.5.28 Thermostat and Outlet Modules Support</td>
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<th>Release 1.3.x</th>
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<tr>
<td>Thursday, September 07, 2006, 1.3.0 Initial Release</td>
</tr>
<tr>
<td>Monday, October 16, 2006, 1.3.0.351</td>
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<tr>
<td>Wednesday, December 20, 2006, 1.3.1.114 Initial Release</td>
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<td>Friday, January 12, 2007, 1.3.1.116</td>
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<tr>
<td>Wednesday, March 07, 2007, 1.3.1.120 Daylight Savings Time Change</td>
</tr>
<tr>
<td>Tuesday, March 20, 2007, 1.3.1.122</td>
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<tr>
<td>Monday, July 23, 2007, 1.3.2.228 Initial Release</td>
</tr>
<tr>
<td>Friday, August 03, 2007, 1.3.2.230 Maintenance Release - Updating firmware on</td>
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<td>Control4 Software Releases (From Inception)</td>
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<tr>
<td>--------------------------------------------</td>
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<tr>
<td>Thursday, August 23, 2007</td>
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<tr>
<td>Maintenance Release - Various fixes, including NAS on HC-300.</td>
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<tr>
<td>Wednesday, October 31, 2007</td>
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<tr>
<td>Support for Amplifier V3 Release</td>
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<td>Thursday, November 15, 2007</td>
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<tr>
<td>Support for HC-1000 Release</td>
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<td>Tuesday, February 26, 2008</td>
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<tr>
<td>Support for HC-500 Release</td>
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<tr>
<td>Wednesday, April 30, 2008</td>
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<tr>
<td>Maintenance Release - Disable Onboard Serial Port on HC300/HC500.</td>
</tr>
<tr>
<td>Wednesday, June 11, 2008</td>
</tr>
<tr>
<td>HC300 VBUS Change to Kernel.</td>
</tr>
</tbody>
</table>

**Release 1.6.x**

| Tuesday, July 29, 2008                     | 1.6.0.486        |
| Initial Release                           |
| Wednesday, Sept 17, 2008                   | 1.6.0.512        |
| Maintenance Release, SR-250                |

**Release 1.7.x**

| Monday, December 01, 2008                  | 1.7.0.348        |
| Initial Release                           |
| Monday, December 29, 2008                  | 1.7.1.290        |
| Dock for iPod Release                      |
| Monday, March 30, 2009                     | 1.7.2.160        |
| Remove Polling; HC-1000v2, ELV Dimmer, 7" Portable Touch Screen |
| Wednesday, April 29, 2009                  | 1.7.3.20         |
| 7" Portable Touch Screen Release           |
| Tuesday, September 29, 2009                | 1.7.3.68         |
| Maintenance Release – Audio priority and 7" Touch Screen |
| Monday, December 14, 2009                  | 1.7.4.36         |
| Maintenance Release – On-Screen focus and Zones improvements |

**Release 1.8.x**

| Monday, August 31, 2009                    | 1.8.0.44415      |
| Initial Release                           |
| Monday, November 16, 2009                  | 1.8.2.56194      |
| Initial Release – multiple ZigBee Servers and Security changes |
| Wednesday, March 17, 2010                  | 1.8.2.66691      |
| Maintenance Release – Thermostat and B&D Lock |

**Release 2.0.x**

| Tuesday, June 29, 2010                     | 2.0.0.80198      |
| Initial Release                           |
| Wednesday, August 18, 2010                 | 2.0.1.86265      |
| Maintenance Release – HC200B/HC300C        |
| Tuesday, September 7, 2010                 | 2.0.2.88485      |
| Maintenance Release – 7" IE Touch Screen   |
| Tuesday, October 19, 2010                  | 2.0.4.92890      |
| Maintenance Release – Fix snmpd/crond lockup |
| Tuesday, December 14, 2010                 | 2.0.5.99233      |
| Maintenance Release – HC200B as primary controller |
| Wednesday, January 19, 2011                | 2.0.6.102864     |
| Maintenance Release – 5" In-Wall Touch Screen |
Control4 Software Releases (From Inception)

<table>
<thead>
<tr>
<th>Release 2.1.x</th>
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<tbody>
<tr>
<td>Tuesday, June 7, 2011</td>
<td>2.1.0.126418</td>
<td>Initial Release</td>
</tr>
<tr>
<td>Tuesday, August 30, 2011</td>
<td>2.1.1.135702</td>
<td>Maintenance Release-Fix Flash Navigator lockups.</td>
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<tr>
<th>Release 2.2.x</th>
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<tr>
<td>Tuesday, January 31, 2012</td>
<td>2.2.0.158343</td>
<td>Initial Release – HC-800 and 7” Portable Touch Screen with Camera</td>
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<tr>
<td>Wednesday, April 18, 2012</td>
<td>2.2.1.171726</td>
<td>Maintenance Release – HC-250</td>
</tr>
<tr>
<td>Monday, June 25, 2012</td>
<td>2.2.2.184775</td>
<td>Maintenance Release – 7” In-Wall Touch Screen with Camera, Door Station – Exterior</td>
</tr>
<tr>
<td>Wednesday, October 3, 2012</td>
<td>2.2.4.200568</td>
<td>Maintenance Release – Sony STR receiver, Door Station – Interior driver</td>
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<tr>
<th>Release 2.3.x</th>
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<tbody>
<tr>
<td>Wednesday, December 12, 2012</td>
<td>2.3.0.210826-res</td>
<td>Initial Release – New agents, new Lighting UI, SDDP, new MyHome device management in licensing.</td>
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</tbody>
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<tr>
<th>Release 2.4.x</th>
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<tr>
<td>Wednesday, April 10, 2013</td>
<td>2.4.0.227470-res</td>
<td>Initial Release – Anywhere Access, Tuneln, Remote Recharging Station, and software improvements.</td>
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</tbody>
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<tr>
<th>Release 2.5.x</th>
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<tbody>
<tr>
<td>Thursday, June 6, 2013</td>
<td>2.5.0.235326-res</td>
<td>Initial Release – Next generation of lighting products, new line of Panelized Lighting products, and Wireless Music Bridge.</td>
</tr>
</tbody>
</table>

4. Technical Support Contact Information

If you encounter any issues during or following the update, or if you have any questions, please contact Control4 Technical Support for assistance.

Phone: 1-888-400-4072
Email: support@control4.com

For additional information about the new features and capabilities of OS 2.5.0 or later, refer to the new product training on the web at http://dealer.control4.com/dealer/training.
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