



Control4 Operating System (OS) Release Version 2.7.0 Release Notes

Control4 Operating System 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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Contact Information

Control4 Corporation

11734 S. Election Road

Salt Lake City, UT 84020 USA

<http://www.control4.com>

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1. Introduction

This Control4® Operating System 2.7.0 (OS 2.7.0) release is a major milestone release that includes great new hardware and software features. With this release we are providing a new Comfort experience, elegant new touch screens with a redesigned Intercom interface, newly designed remote, and new tools for dealers.

The intended audience for this release consists of Control4 Dealers servicing new installations, dealers and/or developers desiring to integrate with Control4, dealers wishing to expand further into the international market, and dealers needing maintenance upgrades. For those wishing to use this as a maintenance update, the 2.7.0 release has the same product life cycle requirements that were introduced in 2.6.0 and can be found in the life cycle section

We also know how important it is for you to be able to expand your business. With this in mind, we will highlight areas throughout this document where we have expanded international capabilities as well as integration capabilities with Control4 through our developer community. The symbols below will highlight these items to help you quickly reference them.



Global symbol—Signifies areas where options or features have been enabled that allow expansion into more global markets.



Integration capabilities—Signifies areas where new development integration points have been opened up to third party developer.



Note—Signifies important notes in the section when considering your implementation of this solution.

1.1 T3 touch screens

The T3 generation of touch screens have a big performance increase and are available not only in the standard 7 inch touch screen, but in 10 inch as well. The 7 and 10 inch in-wall models will release with OS 2.7.0. The 7" portable will be a post 2.7.0 release. These touch screens also feature a redesign of the Intercom interface.



The T3 touch screens are completely redesigned while still maintaining backward compatibility with the in-wall back box. This allows you to replace existing touch screens without having to create new holes in your wall. Much thought and effort went into creating a simple elegance in the look and feel of these touch screens.



Installation changes

- The connection between the touch screen and mid-box requires the installer to attach a ribbon cable connector to the mid-box.
- Adhesive tabs are included with the 10" in-wall touch screen and can be placed on back of touch screen to firm up the fit against the wall and to provide added stability if desired.
- In-wall touch screens require a removal tool in order to be removed from the wall (tool included with every touch screen)
- The location of the mid-box relative to the screen has changed in comparison to the V1 and V2 touch screens. Please use the install template (included with wall box and in online documentation- ctrl4.co/t3) to ensure that touch screen is positioned as desired on the wall.

Other items

- Hard programmable buttons are not available on these series of touch screens, but the custom buttons are still available.

1.1.1 Blazing performance

We have really increased the performance of the new touch screens. They are blazing fast. Below are some specs with some important changes.

- *Major processor upgrade—We moved to a 1.4 GHz Quad Core ARM A9 resulting in much faster response and processing times.*

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- *Flash memory increased*—We updated the amount of flash memory to 8 GB.
- *RAM increased*—Increased the RAM to 1 GB.
- *Screen resolution*—The resolution was increased to 1280x800.
- *Operating system* – The new touch screen operating system is Android based.

1.1.2 Touch screen user interface

The new user interface continues to show the same crisp look and feel as the previous touch screens but we have also included several new features, some of which are only available on the new touch screens.

- **Top and bottom status bars**—There is a crisp new look and feel with redesigned top and bottom status bars.
- **Gesture and swiping support**—Browse through large movie and music libraries with a swipe of the finger.
- **Weather access**—Now access the weather report right from the Navigator home screen by pressing the temperature icon at the top of the page.
- **Date and Time Screen Saver**—With the new touch screens comes a new screen saver that shows a full screen view of the date and time in a digital clock type format.
- **Lock UI**—On previous releases, you had the ability to manage Yale and Black & Decker locks with their respective apps, but on the new touch screens we have integrated that capability right into the Security UI. The new Locks interface can manage both Yale and Black & Decker (Kwikset/Baldwin) locks or a mix of the two from the same location.



You need to be on the latest Black & Decker (Kwikset/Baldwin) lock driver in order to be able to use the new Locks interface.

1.2 Intercom for touch screens

The intercom backend has been redesigned by rebuilding on an open architecture and creating an intercom proxy and a communication agent. This enables the ability to for third parties to integrate with the new proxy using open standards. This also allows us to add third-party SIP integration through local mobile phone use and through third party SIP phone hardware. We have given a new look and feel to the Intercom interface for the new touch screens and added the availability of HD quality video for intercom calls.

1.2.1 Intercom speed improvements

With the speed of the new touch screen hardware and the revamp of the intercom software on the Android OS there has been a dramatic increase in the performance of the intercom calls. You can realize the full potential of those changes when making calls between the new touch screens. The performance of the V2 (Broadcom) and V1 (Infinity edge) touch screens is approximately the same as in previous releases.



It is possible to have a mixed environment with both the new and the old touch screens. The intercom performance will depend on the touch screens involved in the call. The old touch screens will perform slower than the new ones.

1.2.2 Intercom interoperability



Intercom is now built on an open architecture, making it easier to integrate with third party products. An important part of the new architecture is the Intercom Proxy, which enables third-party device drivers to communicate with the various components of the Intercom solution.

1.2.3 Third-party SIP product integration

The Control4 Video Intercom solution is also interoperable with third-party SIP products, including phones, door stations, and mobile apps for iOS & Android when connected to the same network. At launch, supported door stations include products from industry leaders like 2N and Siedle. Recommended mobile apps include Linphone, Groundwire and Bria.

Third-party SIP phone integration—Control4 has created a new driver called the Universal SIP Phone driver. This allows certain SIP phones (like Grandstream) and mobile phones (with compatible mobile apps) to connect to a Control4 system and make intercom calls over a local network. To do this you need the following components:

- Universal SIP Phone (Communication) driver created by Control4.
- Mobile integration—We recommend the following SIP applications for your mobile devices. Please note that some SIP application providers charge a one-time fee for their application.
 - Groundwire
 - Bria
 - Linphone - Please note that Linphone app does not support H.264, so video calls can only be made with the new touch screens using this app. The V2 (Broadcom) touchscreens require H.264 for their video.
- If integrating a phone, we recommend Grandstream SIP phones for this release
- SIP phones and SIP applications can receive door station calls without video preview, and either make or receive calls to individual intercom-capable devices.



Mobile and SIP phone devices do not receive 'broadcast' calls, which occur when a group is called by the older touch screens. However, they will receive an incoming call notification when the new touch screens, other SIP phones and other mobile devices call a group.



A new property has been added to support Control4 door station calls to mobile and SIP phone devices. The Doorbell Button Press property is located in the door station properties section in Composer. The "Forking Call" option must be selected for this property. Please note that when this option is selected, an alternate camera must be used in order to see video preview on touch screens.

Third-party door station integration—Control4 provides the ability in 2.7.0 to also integrate some third party door stations with our Control4 Intercom solution.

- Integration with the following 2N IP door entry systems through a Control4 driver for 2N
 - Helios IP systems, including Verso, Force, Safety, Vario and Uni
- Integration with Siedle Access door entry systems, through a Control4 driver for Siedle:
 - Vario, Steel and Classic models

1.2.4 Alternate Camera View

The use of alternate cameras as a video source for intercom calls is supported in this release. Control4 Door Stations, third-party door stations and Control4 Broadcom (V2) and T3 touch screens can be configured to use an alternate camera for the intercom call.

- Transmit video from any IP video camera compatible with the latest version of the Control4 Camera Proxy, instead of using the default camera for that device
- Use features such as pan, tilt, and zoom during the intercom call, if supported by the IP camera

1.2.5 Personalization

Control4 continues to enhance the personalization capabilities of its products. Intercom has made the following changes to support personalization:

- The ability to adjust microphone gain settings (available for Android touch screens only)
- Default settings page is consolidated into a single page, with easier and more interactive controls
- The ability to rename existing groups

1.2.6 Intercom Communication agent migration

In order to install the new touch screens into an intercom environment in 2.7.0, installers/programmers will need to remove the Intercom agent and replace the existing touch screen drivers within the customer's project. The migration wizard automates these steps and will take care of all changes with the exception of custom programming.



In order to use the latest intercom features, it is necessary to upgrade from the Intercom agent to a new agent called Communication. Upgrading to the Communication agent requires that the current touch screen drivers be replaced with new ones that are compatible with the new intercom architecture. To help dealers migrate their clients to the Communication agent, the following support has been added:

- Upgrade when ready
 - It is not necessary to migrate to the Communication agent at the time the client's system is upgraded to OS release 2.7. The migration can happen any time after the update to OS 2.7, but is required if the new T3 touch screens are installed and the project is using the Intercom Agent.
- Communication Agent Wizard
 - An upgrade wizard has been added to make the transition to the Communication agent easier to accomplish. The wizard automatically removes the old Intercom agent and associated drivers and replaces them with the Communication agent and the appropriate new drivers. It also documents any programming associated with the touch screens and door stations so that they can be manually restored after the wizard is complete.
- Compatibility with Broadcom and Infinity Edge
 - The Communication Agent is compatible with V2 (Broadcom) and V1 (Infinity Edge) touch screens, if the new drivers for these touch screens are installed.

1.3 Control4 Wireless Thermostat by Aprilaire (C4-THERM)

The Comfort experience around heating and cooling has been completely revamped. In addition to the new Comfort interface, we are introducing a new thermostat created in partnership with Aprilaire, a well-known HVAC company. The thermostat has a sleek new design that closely matches the design of our current lighting product. This thermostat has expanded capabilities over the previous hardware design.

1.3.1 Thermostat hardware

The new thermostat hardware was designed to closely match the style and look of the current Gen3 lighting, by tapering the corners and matching the button styles. It provides new capabilities that didn't previously exist in the old CCZ thermostat.



Comparison between C4-THERM and C4-CCZ

	C4-Therm	C4-CCZ
Communication type	ZigBee	ZigBee
Dual fuel based on outdoor temp	Yes	No
Humidity control	Yes	No
HVAC compatibility	4H/2C	4H/2C
HVAC contractor respect	Excellent	No

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	C4-Therm	C4-CCZ
Requires a common wire	No	Yes
Screen	Monochrome	Monochrome
Sleepy node	Yes	No
Works on battery only	Yes	No
ZigBee repeater	No	Yes

Supported configurations

- Single stage conventional heat only
- Dual stage conventional heat only
- Single stage cool only
- Dual stage cool only
- Single stage conventional heat + single stage cool
- Dual stage conventional heat + single or dual stage cool
- Single stage heat pump (heat + cool)
- Dual stage heat pump (heat + cool)
- Radiant heat + single or dual stage cool
- Geothermal heat pumps

1.3.2 Brand-new Comfort look and feel



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The new Comfort UI closely matches the look and feel of the recently released Pool and Spa UI. The temperature can be adjusted a couple ways, by tapping on the current temp, then raising or lowering the set point, or by holding and moving the indicator on the outer ring. The clean layout is uniform across all Navigator platforms. Simple, intuitive access is provided to all of your climate control functions: adjust temperature, heat/cool set points, thermostat mode, fan speed, fresh air, and humidity levels.

1.3.3 Programmable Presets

The new Comfort experience introduces Presets, a powerful and flexible way to save all of your comfort settings. With one touch you can recall the right settings for any mood or activity, or recall them on a schedule. Presets make it easy for your home to respond to your life—no longer are you bound to a rigid time-based schedule

1.3.4 Humidity

Adding a humidity system to your home will only increase your comfort level. We have now expanded our ability to enhance that comfort level. If you have an existing connected humidity system, or if you add one, you can manage it from the new Comfort interface as well.

1.3.5 Third-party integration



Thermostat Proxy integration - We have enabled the ability for third parties to interface with the new Thermostat Proxy so that you can tie into the new capabilities within the new Comfort interface. With the launch of OS 2.7.0, we not only have the new Control4 Thermostat integrated with the new proxy, but several third party drivers as well.

1.3.6 Internationalization



Smaller increments—Much of the world uses Celsius. The new thermostat and UI add the ability to have dot increments of the heat and cool set points when the thermostat is set to Celsius, thus allowing for more granularity in adjusting and displaying of set points.



Single set point—Within the new thermostat proxy we have implemented a new feature called single set point. This is designed for thermostats that use only one setting to control heat and cooling, i.e. I want to set my home to 70F and my HVAC system will control the flow of the heat/cool to achieve the actual set point without setting a heat or cool set point. This is the way a lot of heating and cooling systems work in Europe. With OS 2.7, new Heatmiser and CoolMaster drivers have been updated to use the new thermostatv2 proxy and single set point

1.4 System Remote (SR-260)

The SR-260 brings together a set of features that will not only provide for a better experience with the remote, but also expand the market internationally. The new changes consist of a new redesign around button placement and ease of use. The hardware was updated with a color screen and a faster processor.



1.4.1 Hardware improvements

The SR-260 is a great step up from the previous remote.

- Full color screen with better resolution.
- Improved button layout for ease of use.
- Faster processor.
- Hidden light sensor
- Both an icon based layout as well as a text based layout.
- List Navigator improvements

1.5 List Navigator improvements

Change the color—The previous version of the remote had only one color. The new remote allows you to set 18 different color palettes for your List Navigator, thus allowing you to customize to the individual consumer's taste and personality.

Higher-resolution graphics—The new OLED screen has a much higher resolution than the previous remote, providing a much crisper look to the status icons within the list navigator.

Hide/show device and sort capabilities—On previous releases your touch screens had the ability to hide and show devices as well as the ability to follow your sort list within Composer. This ability has been extended to the SR-260.



If the “Show Device List” for “Watch/Listen Button Behavior” has been selected within Composer, we will not show Watch and Listen when the user presses the List Navigator menu button. This is a configuration change from last release due to feedback received during the beta and this change applies to List Navigator on both the SR-250 and SR-260. To make Watch and Listen show in the List

Navigator menu, choose “No Action” or “Select Most Recently Used Device” under “Watch/Listen Button Behavior.”

1.5.1 Button layout and improvements

A lot of thought and effort went into evaluating our button layout on the SR-260. Feedback was received and we listened. This new layout really helps in placing the buttons in what was felt as the most logical locations.

1.5.2 Icon-based remote



While the icon-based remote will allow you expand into international markets, it is not exclusively for that purpose. We have found that there are those who prefer the icon based remote because of its simple and intuitive design.



1.6 Composer changes

1.6.1 Remote Director improvements

- Default dealer account credentials—when you connect via Remote Director, you need to enter your dealer account credentials to connect to a customer system. The username and password of your default account will be stored and automatically used when accessing account information and making a remote connection.
- Account information—The Select Remote Account dialog now provides additional information about customer systems in your remote account access list. This information includes: service level, OS version, allows support, and online status (requires dealer account credentials with access to the customer accounts).
- Sort on any column in the Select Remote Account dialog.

- When adding accounts to your remote access account list, there's a type-ahead search on the account name field for the customers associated with your dealership.

1.6.2 Remote Director programming performance improvements

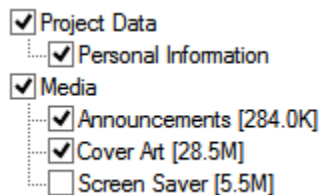
- Significant improvements in the performance of the system item tree now makes remote programming of customer systems much faster.
- Automatic project internal binding validation is disabled on remote programming sessions to improve performance—Validate Project can now be invoked manually from the File menu.

1.6.3 Account Services improvements

- The account services Status screen now shows the following information: Account Status, Customer Account Name, Customer Account Email, Service Level, and VPN status. A log of the status change informational messages is also displayed.
- When registering a controller to an existing customer.control4.com account under your Dealership, use the Select Account interface to select, with type-ahead search response, the desired customer account by account name.
- When installing a new customer system, you no longer need to separately create the customer.control4.com account. You can now do this with Composer's Account Services | Add New Account form. The customer.control4.com account will be automatically created and you can then register the controller to that account. The customer can login, validate their email address, and configure their password separately.

1.6.4 Project backup / restore improvements

- The installer/programmer is now able to select which parts of the system should be included in the backup, including for the first time ever, screen saver images and announcement files. This enables more complete project backups when migrating a system from one controller to another.
- Selective restore enables the Programmer to restore project programming without disrupting (or overwriting) the media database or vice versa.
- Restore/remove tells Composer to remove existing media content before restoring the designated project.



1.6.5 Advanced Lighting Scenes agent performance improvements

The Composer portion of the Advanced Lighting Scenes Agent has been updated. The functionality has not changed but the layout and processing in Composer is much more efficient.

- More compact layout makes it easier to see and work with larger scenes
- Significant performance improvements for creating and editing advanced lighting scenes – especially scenes with large numbers of loads.
- Graphing of scene behavior is now separate from editing controls.

1.6.6 Arc-fault filtering for Panelized Lighting

- The drivers for Panelized Lighting lights now allow you to indicate whether the light must be connected to an arc-fault breaker. When making connections to modules, Composer will not allow you to connect an arc-fault required load to a module that is not using an arc-fault breaker. Filters have also been added to the connections pages to make it easier to find arc-fault required (or not-required) lights and connect them to an appropriate module.

1.6.7 Push Notification Agent

- Installers/Programmers or Customers who purchased Composer HE, can now configure Push Notifications that carry information about category and severity. These notifications are delivered to the customer based on their push notification preferences, which they can configure at customer.control4.com. Push Notifications are supported on iOS and Android mobile devices.

1.6.8 Remote connection performance

- The performance on the collapse room capability was greatly increased but the place where we saw the most benefit was in remote connection.

1.7 Composer Express features

With the initial release of Composer Express we received a lot of positive feedback. The release of Composer Express 2.7.0 expands those capabilities even further while still maintaining backward compatibility to manage 2.6.0 projects. Composer Express now has the feature set to completely setup a basic one room audio/video system by discovering devices or using a pre-defined template. This includes adding a new customer account, registering the controller and even assigning a 4Sight license all from your phone.

1.7.1 Remote Access

When Composer Express originally released, it would only allow you to connect to a project if you were local to the network. With Composer Express 2.7.0 you now have the option of connecting to and managing a project remotely. In order for remote access to work, you must meet the following criteria:

- The controller operating system must be on OS 2.7.0
- The Composer Express installer must have a Composer Pro License enabled on their installer account.

1.7.2 Apprentice installer support

Previously you had to have a Composer Pro License to use Composer Express. This has not changed, but we have made an allowance for training apprentice installers. Apprentice Installers must take an online course on Composer Express. After successfully completing the course they may use Compose Express to completely install basic systems or use Composer Express on larger projects under the guidance of Composer Pro certified installers. An apprentice installer should not have a Composer Pro license enabled on their my.control4.com dealer account. Installers that complete the full Control4 training are able to use Compose Pro and have the license enabled on their account. When a Composer Pro license is enabled on an Installer's account, the Installer may use the Remote Access feature of Composer Express.

1.7.3 Set Room Properties

You now have the capability to set properties at the room level. This includes the ability to set the visibility and display order of devices in the room, and the ability to hide the room completely.

1.7.4 Driver storage with USB or Dropbox

Easily store and access your favorite c4i and c4z drivers through a storage location. We have enabled this expansion through a USB drive or a Dropbox storage account allowing you to take these with you on your mobile device wherever you go. This coupled with the new remote access feature make the management of your project truly mobile.

1.7.5 Set Device Properties

You now have the ability to set the properties of the most commonly used devices including remotes, lights, sensors, relays, IR, serial drivers, cameras and any driver built with Driverworks.

1.7.6 Load and back up projects

You now have the ability to back up and restore a project with Composer Express to and from a USB drive attached to the primary controller and to your Dropbox account.

1.7.7 Updated Connections page

The workflow associated with making connections between devices is improved. It is now much easier to view and make AV-Input, AV-Output, Control, and Room connections.

1.7.8 ZigBee network management

We have added the capability for managing multiple meshes for large networking. Managing the ZigBee networks is located in the Projects > Settings page. If multiple mesh networks exists, we now allow for the ability to select the given mesh when you identify the device into the project.

1.7.9 Enhanced customer accounts

You now have the ability to add a 4Sight license and complete account provisioning without having to use the web portal. We have also added the ability to search for customer accounts using any portion of the Account Name. Account search is available on the Customer Accounts, Register Controller, and Remote Access pages.

1.8 Mobile changes

1.8.1 Push Notifications

OS 2.7 implements push notifications. Push notifications are popup messages that appear on Android or iOS mobile devices. Configuration of push notifications consist of two parts: Composer (Composer Pro or Composer HE) and the customer portal (customer.control4.com). On the Composer side, the user has to add the push notification agent and then configure the notification message. Users can choose one of the categories from the list: Security, Listen & Watch, Lighting, or Comfort. Next the user will need to choose the severity: Alarm, Alert, or Informational. These notifications can then be added to the programming using Composer event programming. End customer has the ability to setup filters on customer.control4.com for which push notifications they wish to receive.

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When adding or upgrading new devices to the account, the customer will have to associate push notification categories with the new devices.

The customer will go to the Customer Portal to set up the devices which will receive the push notifications:

	Alarms	Alerts	Informational
Lighting	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Security	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Listen and Watch	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Comfort	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

1.8.2 RA Proxy camera performance

In 2.7 release we improved architecture on our controllers as well as in our Web Services by re-using our control channel and minimizing round trips between controller and Web Services. This improves service connection establishment dramatically. If you have a project that is accessing a lot of cameras over iOS and Android, you will see a huge improvement in the time it takes to load. Some measurements show that it is at least 10 times faster in loading projects with many camera views. The loading of camera image data is still limited by the performance of the cellular carrier or upstream ISP speed on the customer's network.

1.8.3 Anywhere Access performance

As of Q1-2015, Control4 Anywhere Access services are leveraging distributed TURN servers to improve global performance and responsiveness.

2. Life cycle and maintenance changes

OS 2.7.0 includes some important defect fixes. The OS 2.7.0 platform carries the same supported hardware and software list that was stated in OS 2.6.0. The section below is not meant to be a comprehensive list, but it is a list of high-priority fixes of which you should be aware. These issues were identified in previous releases.

2.1.1 Hardware products not supported in 2.7

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Due to performance and/or disk space issues, we do not support an upgrade to the following devices in OS 2.7.0 (see table below). This does not exclude an existing project which has these devices from continuing their support on the OS 2.5.3 platform.

We will continue to provide critical patches and maintenance to the OS 2.5.3 platform. However, if you are planning on moving forward with the OS 2.7.0 platform and you have one or more of the devices listed below, you will not be able to update your system until those devices are removed from your project.

Control4 Devices	SKU
Home Theater Controller	AVM-HTC1-B, AVM-HTC2-B
Media Controller	AVM-MC1-B, AVM-MC2-B
Sony® Controller	STR-DA2800ES, STR-DA5800ES
Mini Touch Screen	TSE-3.8C1-*, TSG-3.8C1
Mini Touch Screen v2	TSE-3.8C2-*, TSG-3.8C2
10.5" Portable Touch Screen v1	TSM-10.51-B
10.5" Portable Touch Screen v2	C4-TSM10-G-B
10" In-Wall Touch Screen	C4-TSWM10-E
7" Table Top Touch Screen	C4-TSTR7-EG-B
7" In-Wall Touch Screen	C4-TSWM7-E-B, C4-TSWM7-EG-B
7" Portable Touch Screen	C4-TSM7-G-B

2.1.2 Software upgrades not supported in OS 2.7.0

The software upgrade path is the same path that was introduced in OS 2.6.0, meaning that with OS 2.7.0, you will only be allowed to update from an OS 2.2.x version or higher. If you are on a version below this, the *Update* button within Update Manager will not be available.

OS	Notes
1.7.4.36	This OS is not supported as an upgrade path to OS 2.7.0. You will have to update to a 2.2.x version before you can update to OS 2.7.0. Please note the hardware end of life list, as well.
1.8.2.66691	This OS is not supported as an upgrade path to OS 2.7.0. You will have to update to a 2.2.x version before you can update to OS 2.7.0. Please note the hardware end of life list, as well.

2.1.3 Products with limited support in OS 2.7.0

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The products with limited support in OS 2.7.0 is the same list that was introduced in 2.6.0. Therefore, due to performance and/or disk space issues, we've decided to limit the following devices in their type of support on the OS 2.7.0 platform.

Control4 Devices	SKU	Limitation
HC-500	C4-HC500-E-B, C4-HC500B-E-B	Can only be used as a Secondary Controller. Will not support switching over to Audio v3 and ZigBee Proxy Broadcast.
HC-300	C4-HC300-E-B, C4-HC300B-E-B, C4-HC300C-E-B	Can only be used as a Secondary Controller. Will not support switching over to Audio v3 and ZigBee Proxy Broadcast.
HC-200	C4-HC200-E-B, C4-HC200B-E-B	Can only be used as a Secondary Controller. Will not support switching over to Audio v3 and ZigBee Proxy Broadcast.
Speaker Point	AVE-RAA1-B, AVG-RAA1-B	Speaker Point is supported on OS 2.7.0 but will update to a final supported version of OS 2.5.3. Will not support switching to Advanced Audio System unless in 'Local Amp' mode.

2.1.4 Important improvements and bug fixes included in OS 2.7.0

Below is a list of items that were found after OS 2.6.0 released and were included in the OS 2.7.0 release.

- KNX Network Driver can't connect to IP gateway after upgrading to OS 2.6.0.
- iOS audio control Issues.
- Intercom broadcasts have no audio in certain situations.
- LUA drivers see data coming in from the wrong handle when there are multiple server connections.
- "Too many open files" and open files growing on OS 2.6.0.
- Rhapsody will stop functioning after playing an announcement
- Chinese words show messy code in 2.6 Composer.
- If DirectorState.xml is missing, wrong backup file is used.
- Sonos (MSP) - Cannot cancel external authentication dialog in Zoneplayer driver.
- Sonos (MSP) - Multiple connects into a single matrix causes path selection issues.
- Sonos (MSP) - driver locking up director.
- (EV Driver) Volume control via IOS on Russound CAV6.6 does not work.
- Sonos (MSP) - Tracks not being parsed correctly and crashing Director when in queue.
- Sonos (MSP) - 2nd stream won't start with 2 Network Drivers & 2 Pandora Clouds.
- iOS app crashes when switching rooms from a lighting page.
- Watch sources do not call reconnect logic on AV switches which don't separate audio/video paths.
- 2.6 install stick does not work licenses not found.
- Advanced Lighting Scene: Lights getting included in scene that aren't selected to be included.

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- Flash: Camera image is overlaying other screens.
- Flash, Android, and iOS: Thumbnails not showing up for Lilin DVR.
- Flash: Panasonic and Axis cameras are not streaming images.
- iOS: Cameras not streaming in movie mode over RAS.
- (EV Driver) light_ExtraVeg_ArtNet_RGB driver causing Sending data to UI 10 times a second, resulting Director memory footprint...
- Grace Internet Radio driver should not be creating a Director log entry 770 times in one second.
- iOS slow volume ramping.
- Director getting disabled in 2.6.0.
- Sonos V8.02 - if network is powered on after Sonos & HC-800, it causes Director to peg and leak until OOM, crashing Director.
- Intercom SIP signaling is UDP, not TCP.
- HC-250's shipping on OS 2.6.0 are not able to set a locale.
- Director getting pegged when navigator is being refreshed.
- Syslog-ng maxing out the cpu (Navigator not logging).
- HC-800 is defaulting to 10mb connection.
- The physicaldevicemanager.log and net-watchdog.log are not getting rotated.
- Panasonic IP cameras are no longer showing on the touchscreen navigators, for iOS, Android, and Flash.
- Android: Elk M1 Gold: no longer get feedback as buttons are pressed on the app and does not show the correct state.
- AMSV3: if input gain has been adjusted on the AMS, audio volume will drop on the first zone when any other zones are added to ...
- Pool controller proxy: Missing programming options for heater for both pool and spa,
- Composer 2.6.0 issues - False positive on project corruption, Composer backup issues, proxy issues on controllers and projects.

2.2 New or updated firmware

The table below lists any firmware that has received an update with OS 2.7.0. If the firmware has not been updated in this release, then it isn't on this list. For the full firmware list, see [Support Knowledgebase Article 418](#).

Control4 Devices	Firmware Version
Audio Matrix Switch V3	03.25.29_2.7.0.504386-fw
Panelized Lighting	03.24.57_2.6.0.460377-fw
Gen 3 Lighting	4.0.39.0cecba2
Gen 3 Keypad	4.0.18.3bd51bf
System Remote Control SR-260	1.0.67.5ee86e9
Wireless Dimmer and Switch EM357 Puck	4.0.16.3474930
Wireless Thermostat	03.25.27_2.7.0.500487-fw
C4-THERM Thermostat	4.0.110.061225c
Wired Keypad	4.0.43.f9b0206

3. Notifications, limitations, warnings, and workarounds

3.1 OS 2.7.0

- The new Touch Screens will not support broadcast intercom until the next release.
- SR-260: Electro static discharge, in some cases, can cause the EM357 chip in the remote to get into a locked state. When this happens the remote will remain on the current screen and be unresponsive. Then, after a few seconds, the screen shuts off and the remote appears to have shut off. During this time the remote will be unresponsive. This occurrence can be rare but if it happens, removal of the batteries and a ten to fifteen second delay before re-inserting them can resolve the issue. (power cycle the remote).

3.2 Prior releases

For details about previous software releases, see the Release Notes for that release.

- Release Notes for OS 2.6.0.
See <http://www.control4.com/docs/product/control4-software/dealer-release-notes/revision/K/control4-software-release-notes-rev-m>.
- Release Notes for other releases.
See <http://dealer.control4.com/dealer/support/documentation> under Software or check the Control4 Knowledgebase.

For details about ZigBee upgrades:

- See <http://dealer.control4.com/dealer/support/documentation> under Software and ZigBee Pro Upgrade.
- Also see the next section.

4. Upgrading to OS 2.7.0

There were some major changes in OS 2.6.0 that still apply with 2.7.0. They will require careful consideration if you are not already on OS 2.6.0 or higher. These changes include some life cycle changes, removal of legacy software, and the splitting of mobile apps into two separate applications: one for supporting legacy installations, and one to move forward with the new installation requirements.

4.1 Update recommendations for existing systems

IMPORTANT! (1) The OS 2.7.0 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 2.7.0. Other products are supported, but may have limited functionality or may not provide access to new capabilities. For a current list of products and lifecycles, see <http://dealer.control4.com/dealer/support/product-lifecycle>. (3)

OS 2.7.0 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.

4.1.1 ZigBee Pro

Control4 has been utilizing ZigBee Pro for ZigBee RF communications since the release of OS 1.8 in August 2009. With the introduction of OS 2.6.0, you no longer have the ability to upgrade Embernet-based devices, and will continue to be the case in subsequent releases. If you have Embernet-based ZigBee devices in inventory or taken from another system, they must be installed on an OS 2.5.x system and have their firmware updated to ZigBee Pro prior to being installed on an OS 2.7.0 system.

4.1.2 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 2.7.0. Customers who have systems purchased prior to OS 2.0 can purchase a software license for OS 2.7.0.

- 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 2.7.0. 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 2.7.0.
- 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.

4.2 Quick reference to the OS 2.7.0 and later upgrade process

4.2.1 Pre-work prior to arrival at the customer's location

1. **Ensure that Composer Pro for OS 2.7.0 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 the premises for upgrading from OS 2.2.x to OS 2.7.0 and later.** After the Primary Controller has been updated to OS 2.7.0, the USB Install for OS 2.7.0 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 2.7.0.

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3. **If a software license is needed, use your dealer account** on my.control4.com to assign the license to the customer's account.
4. **If updating from Release 1.7.4, 1.8.2, or a prior version**, you must first upgrade them to 2.2.x before they will be allowed to upgrade to 2.7.0

4.2.2 Upon arrival at the customer's location

5. 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 have been identified and are 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.
6. (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.
7. Connect to the Control4 system using Composer Pro 2.7.0 (or later) to initiate the upgrade to OS 2.7.0 or later, and then use Update Manager to begin the update process.
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.

4.3 Residential software product releases

Control4 Software Releases (from Inception)		
Release 1.x.x		
Wednesday, July 06, 2005	1.0.203.8	Initial Release
Friday, September 02, 2005	1.1.2.2	Maintenance Release
Friday, October 14, 2005	1.2.0.90	Maintenance Release
Thursday, November 03, 2005	1.2.2.6	Maintenance Release
Sunday, December 28, 2005	1.2.3.43	WiFi Support
Monday, March 06, 2006	1.2.4.48	Maintenance Release
Thursday, March 23, 2006	1.2.4.50	Maintenance Release
Tuesday, May 30, 2006	1.2.5.28	Thermostat and Outlet Modules Support
Release 1.3.x		
Thursday, September 07, 2006	1.3.0	Initial Release
Monday, October 16, 2006	1.3.0.351	
Wednesday, December 20, 2006	1.3.1.114	Initial Release
Friday, January 12, 2007	1.3.1.116	
Wednesday, March 07, 2007	1.3.1.120	Daylight Savings Time Change
Tuesday, March 20, 2007	1.3.1.122	
Monday, July 23, 2007	1.3.2.228	Initial Release
Friday, August 03, 2007	1.3.2.230	Maintenance Release—Updating firmware on Amp, Switch, etc.
Thursday, August 23, 2007	1.3.2.234	Maintenance Release—Various fixes, including NAS on HC-300.
Wednesday, October 31, 2007	1.3.2.298	Support for Amplifier V3 Release
Thursday, November 15, 2007	1.3.2.318	Support for HC-1000 Release
Tuesday, February 26, 2008	1.3.2.438	Support for HC-500 Release
Wednesday, April 30, 2008	1.3.2.442	Maintenance Release—Disable Onboard Serial Port on HC-300/HC-500.
Wednesday, June 11, 2008	1.3.2.442	HC300 VBUS Change to Kernel.
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

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Control4 Software Releases (from Inception)		
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—HC-200B/HC-300C
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—HC-200B as primary controller
Wednesday, January 19, 2011	2.0.6.102864	Maintenance Release—5" In-Wall Touch Screen
Release 2.1.x		
Tuesday, June 7, 2011	2.1.0.126418	Initial Release
Tuesday, August 30, 2011	2.1.1.135702	Maintenance Release—Fix Flash Navigator lockups.
Release 2.2.x		
Tuesday, January 31, 2012	2.2.0.158343	Initial Release—HC-800 and 7" Portable Touch Screen with Camera
Wednesday, April 18, 2012	2.2.1.171726	Maintenance Release—HC-250
Monday, June 25, 2012	2.2.2.184775	Maintenance Release—7" In-Wall Touch Screen with Camera, Door Station – Exterior
Wednesday, October 3, 2012	2.2.4.200568	Maintenance Release—Sony STR receiver, Door Station – Interior driver
Release 2.3.0		
Wednesday, December 12, 2012	2.3.0.210826-res	Initial Release—New agents, new Lighting UI, SDDP, new MyHome device management in licensing.
Release 2.4.0		

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Control4 Software Releases (from Inception)		
Wednesday, April 10, 2013	2.4.0.227470-res	Initial Release—Anywhere Access, Tuneln, Remote Recharging Station, and software improvements.
Release 2.5.x		
Thursday, June 6, 2013	2.5.0.235326-res	Initial Release—Next generation of lighting products, new line of Panelized Lighting products, and Wireless Music Bridge.
Thursday, August 8, 2013	2.5.1.242407-res	Maintenance Release—Configurable Decora Wired Keypad, Bus Ethernet Gateway, 48V Bus Power Supply; bug fixes.
Thursday, September 19, 2013	2.5.2.247182-res	Maintenance Release—Audio Matrix Switch, 8x8 HDMI Matrix Switch, 100 Series Power Amplifiers, bug fixes.
Wednesday, February 26, 2014	2.5.3.429171-res	Maintenance Release—Camera proxy, integrity detection & repair tool, WMA support, bug fixes.
Release 2.6.x		
Wednesday, September 10, 2014	2.6.0.455411-res	Initial Release— MSP and Pool UI, parity features, composer express, composer search/filter tools, dry input contact, new 48v power supply life cycle changes, bug fixes.
Release 2.7.x		
Tuesday, March 24, 2015	2.7.0.505218-res	Initial Release – Touch Screens, Thermostat v2 (C4-THERM) and Thermostat UI, SR-260, Composer Tools, Mobile Changes

5. 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 more information about the new features and capabilities of OS 2.6.0 or later, visit <http://dealer.control4.com/dealer/training>.

6. Legal notice

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