User Manual

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Varietas Software, LLC

http://www.varietassoftware.com/control4
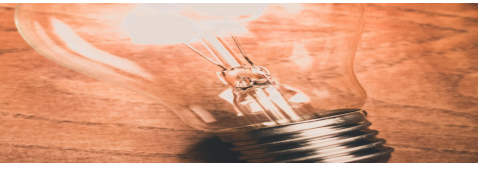
Document Revisions

Date	Version Number	Document Changes
01/08/2017	1.0.1	Initial Draft
4/20/2017	1.0.2	Updated to document Control4 driver 1.5 and firmware 1.0.4
6/13/2017	1.0.3	Updated to document Control4 driver 1.12 and firmware 1.0.8

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Introduction

1.1   Scope and Purpose

The Control4/HomeKit appliance is a network bridge that makes Control4 hardware available to Apple's HomeKit ecosystem.

This User Guide is intended to assist a general user in configuring Control4 devices for HomeKit use, via the appliance.

1.2   Prerequisites

1. The Varietas Software Homebridge driver must be installed in your Control4 project (available from HouseLogix, contact your dealer for details). Only a single copy of the driver is required. You will need to provide your director IP address and the network port the driver is configured for during the appliance setup process.
2. A wired Ethernet connection available somewhere on your network. The physical location of the appliance does not matter.
3. A DHCP server providing dynamic addresses on your network. This is the most common network configuration for most homes. If you have no DHCP server and an entirely static network, you will need to do some advanced configuration. Contact Varietas Software for details.
4. Your Control4 controller configured as the Director must be allocated a static IP address. This can be completed a number of ways. If you need help with this, please contact your dealer.

1.3   Disclaimer

The appliance software relies on homebridge ([https://github.com/nfarina/homebridge)](https://github.com/nfarina/homebridge), an open source platform to enable HomeKit communication with non-HomeKit devices. Varietas Software charges only for the appliance hardware and the web-based configuration software developed specifically for the appliance. Homebridge, and the Varietas Software Control4 homebridge plugin, are freely available open source components. Varietas Software is not affiliated with Apple, Control4, or homebridge in any way. Use of any trademarked terms is entirely descriptive and is not intended to imply any endorsement or relationship with Apple, Control4, or homebridge.

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1.4   Process Overview

For most users, installation and configuration of the appliance is a simple set of steps:

- Plug the appliance into your network with an Ethernet cable (not provided)

- Plug the appliance into a power outlet using the provided AC adapter.

- Use Safari, Firefox, or IE (Chrome not yet supported) to go to
  http://homebridge.local

- Enter the user name and password, when prompted (default:
  homebridge/h0m3br1dg3)

- Provide the IP of your director and the port of the Control4 Homebridge driver

- Click "Import Config From Control4"

- Confirm the imported device list

- Click on "Restart Homebridge"

Detailed help for most appliance options and values is available by clicking the (?) found in various locations on the main page.

Logging Into The Appliance

Open your preferred web browser and go to the URL http://homebridge.local. A login prompt will be displayed. Enter the user name and password for the appliance (default: homebridge/h0m3br1dg3).
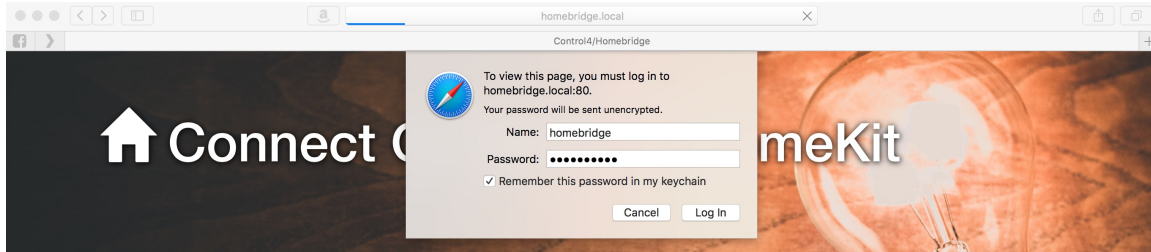

Figure 1: Logging into the appliance

Upon successful login, the main appliance configuration page will be displayed.

Appliance Configuration

If you purchased your appliance directly from Varietas Software or from one of our distributors, then your appliance will come with a license pre-installed.

Figure 2 – The appliance configuration

In most cases, you will not need to configure anything in this section. If your appliance does not have a license, or if your license becomes invalid, the license state will change to indicate the issue, and none of the standard configuration options will be presented. You will be prompted to enter a valid license key. Enter the value provided by Varietas Software or your dealer to continue.

Configuring The Director Connection

The fastest way to configure the appliance is to import the complete Control4 configuration from the director. Scroll down in the configuration page to the Director Location section. Enter the IP Address of your Control4 controller configured as the director and the Homebridge driver port your dealer configured. If your dealer also enabled security on the driver, then enter the shared secret value, provided by your dealer, and check the Security box.

Control4 Director Location

Director IP (?)	192.168.1.200
Homebridge Driver Port (?)	8081
Shared Secret (?)	•••••••
Security (?)	☑
Control4 Driver Version	1.6

Import Config From Control4   Save Director Config

Figure 3: Configuring the director location

Once you have saved the director configuration, the version number of the Control4 driver installed in your project will appear under "Control4 Driver Version". **If this value does not appear, then there is either a configuration issue with the Control4 driver (you likely need to specify a different port), or you have entered the details incorrectly in the configuration portal. Do not proceed with setup until you see the driver version listed.**

If you are ready to import the director configuration, click on "Import Config From Control4". If you are entering updated values for future use, click on "Save Director Config".

During the import process, the appliance will query the Control4 system for supported devices. Any devices detected that are not already in the appliance configuration will be imported. The configuration for any devices already present will be left alone.

Homebridge Configuration

The Homebridge Configuration section contains basic information about your appliance setup. Detailed status is available indicating when homebridge was last restarted and the installed and latest available versions of homebridge, the homebridge Control4 plugin, and the appliance firmware. If updates are available, an update button will be displayed. **Do not disconnect the appliance from internet or power while it is upgrading its internal software.**

In addition to the system status the following global homebridge configuration options are available:

- **Bridge / Home Description** - These values are required, but are for display purposes only.

- **Homebridge Server Port** – The network port the homebridge server will use on the appliance. You should not normally need to alter this value.

- **HomeKit PIN** – This is the value you will enter into HomeKit when you are adding the appliance to HomeKit on your device.

- **HomeKit User Name** – Displayed for information only. You should not need to alter this value.

- **Enable Advanced Configuration Options** – For advanced users only. The options made available by checking this box provide greater direct control, but may cause homebridge to become unreachable. Use at your own risk.

Homebridge Configuration

Homebridge Status	homebridge: active (running) since Thu 2017-04-20 13:55:17 UTC; 81ms ago
Homebridge	Version 0.4.19 (Latest: 0.4.19)
Control4 Plugin	Version 1.0.21 (Latest: 1.0.21)
Appliance Firmware	Version 1.0.4 (Latest: 1.0.4)
Beta Firmware	None Available

Bridge Name (?)	Sarah
Home Description (?)	River's End
Homebridge Server Port (?)	51826
HomeKit PIN (?)	031-45-154
HomeKit User Name (?)	CC:22:3D:E3:CE:31

☐ Enable Advanced Configuration Options

Restart Homebridge   Save Homebridge Config   View Homebridge Logs

Figure 3: Homebridge configuration

You may also:

- **Restart Homebridge** - Restart the homebridge software , which will apply any changes to the running appliance
- **Save Homebridge Config**   - Save any changes to the homebridge device list entered in the sections below to the appliance configuration.
- **View Homebridge Logs** – View and copy/paste the latest homebridge log output. This may help in debugging or to confirm that the system is operating as expected.

Control4 Device List

The last two sections display the configured Control4 devices.   The first section shows the devices currently active in the configuration. These devices will be available in HomeKit. The second section shows devices that are currently being ignored. These devices are known to the appliance, but will not be available via HomeKit. You may choose to ignore devices that are intentionally hidden in your home (virtual switches or unused security partitions, for example).

Control4 Devices (50)

Delete (?)	Name (?)	Type (?)	Device URL (?)	Manufacturer (?)	Model (?)
☐	Alexis Lights	Light ⌄	http://192.168.1.200:8081/1020	Control4	ldz-102-w
☐	Bar Cans	Light ⌄	http://192.168.1.200:8081/88	Control4	ldz-5s1-w
☐	Bar Entry Door	Contact ⌄	http://192.168.1.200:8081/769	Varietas	Contact
☐	Basement Door	Contact ⌄	http://192.168.1.200:8081/763	Varietas	Contact
☐	Basement Fireplace Cans	Dimmer ⌄	http://192.168.1.200:8081/368	Control4	ldz-102-w
☐	Basement Main Cans	Dimmer ⌄	http://192.168.1.200:8081/396	Control4	ldz-102-w
☐	Basement Motion	Motion	http://192.168.1.200:8081/767	Honeywell	Motion
☐	Basement Slide Left	Contact ⌄	http://192.168.1.200:8081/764	Varietas	Contact
☐	Basement Slide Right	Contact ⌄	http://192.168.1.200:8081/765	Varietas	Contact
☐	Basement Windows	Contact ⌄	http://192.168.1.200:8081/766	Varietas	Contact
☐	Bath Overhead	Light ⌄	http://192.168.1.200:8081/482	Control4	ldz-5s1-w

Figure 4 – The Control4 Device List

For each imported device, you can choose the name you would like it displayed as in HomeKit. Every device name must be unique. If you attempt to configure devices with duplicate names, the appliance will automatically make them unique for you. You can change these names later in the Apple Home app, without needing to update them in Homebridge. Choose your names carefully. These names will be how Siri will identify each of your devices. Names that are too generic or too unique may confuse her.

Some identified devices will only reference a single physical device, such as motion sensors, garage doors, or security panels. Other devices may represent several different device types, such as a Control4 switch, which may be connected to a light, a dimmer, a fan, or a fan speed controller. The appliance will do its best to automatically identify the type of device you have imported based on the name of the device in the Control4 project. ***You may need to make corrections.***

Control4 contact sensors are initially identified as a "contact sensor" in HomeKit. In HomeKit, contact sensors will show the current state, but will not report changes via notifications. If you want to be notified when doors or windows are open/closed, change the device type to Door or Window, respectively, and then configure the appropriate notifications in HomeKit.

In addition to the device type and name, you can configure the following values:

- **Manufacturer** – The manufacturer on the device. For display purposes only.
- **Model** – The model of the device. For display purposes only.
- **Ignore Device** – Any checked devices in the active devices list will be moved to the ignored device list when the configuration is saved.

The last section is the Ignored Devices list.

Restore (?)	Name (?)	Type (?)	Device URL (?)	Manufacturer (?)	Model (?)
			Ignored Devices (3)		
☐	Fireplace Fan	Fan	http://192.168.1.200:8081/383	Control4	ldz-5s1-w
☐	Partition 2	Security	http://192.168.1.200:8081/676	Control4	Security Partition
☐	Partition 3	Security	http://192.168.1.200:8081/677	Control4	Security Partition

Figure 5 – Ignored Devices

Devices listed here are not editable, but checking any of them will restore them to the active device list when the configuration is saved.

Advanced Configuration

Checking the Enable Advanced Configuration Options checkbox will display additional, more advanced, configuration options. The appliance comes pre-configured with several helpful homebridge plugins. In the plugin list, each installed plugin will be displayed, and if a newer version has been made available by its developer, you will be given the option to update.

Homebridge Configuration

Homebridge Status	homebridge: active (running) since Thu 2017-04-20 13:55:17 UTC; 20min ago
Homebridge	Version 0.4.19 (Latest: 0.4.19)
Control4 Plugin	Version 1.0.21 (Latest: 1.0.21)
Appliance Firmware	Version 1.0.4 (Latest: 1.0.4)
Beta Firmware	None Available

Installed Plugins: (?)

(Plugin) homebridge-hue	Version 0.3.18 (Latest: 0.3.18)	
(Plugin) homebridge-nest	Version 1.1.2 (Latest: 1.1.2)	
(Plugin) homebridge-platform-wemo	Version 1.1.7 (Latest: 1.1.7)	
(Plugin) homebridge-simplisafe	Version 1.0.0 (Latest: 1.0.0)	
(Plugin) homebridge-smartthings	Version 0.4.7 (Latest: 0.5.1)	Update
(Plugin) homebridge-vera	Version 0.5.4 (Latest: 0.7.1)	Update
(Plugin) homebridge-wink	Version 1.2.0 (Latest: 1.2.0)	

Bridge Name (?)	Sarah
Home Description (?)	River's End
Homebridge Server Port (?)	51826
HomeKit PIN (?)	031-45-154
HomeKit User Name (?)	CC:22:3D:E3:CE:31

☑ Enable Advanced Configuration Options

[Restart Homebridge]   [Save Homebridge Config]   [View Homebridge Logs]

[Edit Raw Homebridge Config File]   [Clear Persistent Homebridge Data]

Figure 6 – Advanced Configuration

The extra plugins cannot be directly configured by the web console, but advanced users can use the option to Edit Raw Homebridge Config File to create the proper configuration entries to utilize these plugins/devices.

In addition to editing the raw homebridge configuration, you may also Clear Persistent Homebridge Data. This will cause the appliance to forget its connection to HomeKit and will require that you re-configure your HomeKit configuration. This is not normally necessary, but may solve some specific issues encountered most often during initial setup. Do this at your own risk.

Finally, you may also change the HomeKit User Name. This is also not usually necessary, but may resolve some connection issues during initial HomeKit pairing. Do this at your own risk.

Adding The Appliance To HomeKit

After you have imported your Control4 configuration, verified that the devices are setup correctly, and restarted homebridge, you are now ready to add the appliance to HomeKit. Open HomeKit on your device, and tap the Add Accessory button (if you do not have any accessories yet) or the + button in the upper right corner (if you already have devices in HomeKit). The Homebridge appliance(s) should be displayed as an available accessory to add. Depending on the number of devices in your configuration, you may have one or multiple homebridge devices available. Select each of the available devices, in turn, and then manually enter the HomeKit PIN, as it is displayed in the appliance web page.

Additional details on adding accessories to HomeKit and configuring devices in HomeKit can be found here (https://support.apple.com/en-us/HT204893).

Support

For questions or support, contact support@varietassoftware.com