



HCA Tech Note 512

Google Home (updated 22-Sep-2017)

This note is about using with HCA the Google-Home Voice Assistant. It assumes that you are running HCA Plus in client-server mode and have established a HCA Cloud account. It also is assumed that you have selected those devices, programs, and groups that you want to control by voice and given them the names you want to use.

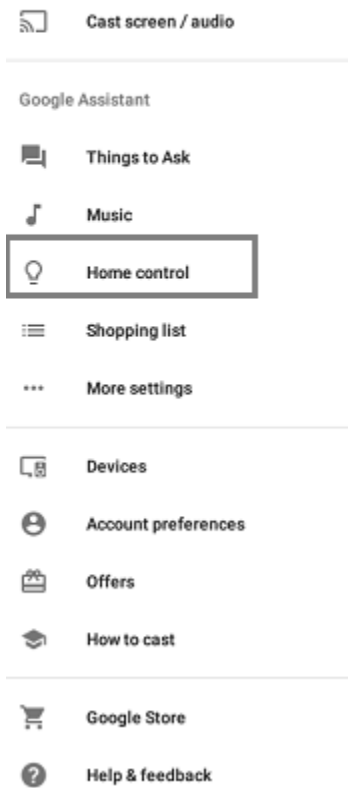
More information about these topics can be found in the Getting Started Guide on the support web site.

Note: This note is temporary as will be updated. For now, just follow the directions to use the “Voice UPB Bridge” and it will work with HCA.



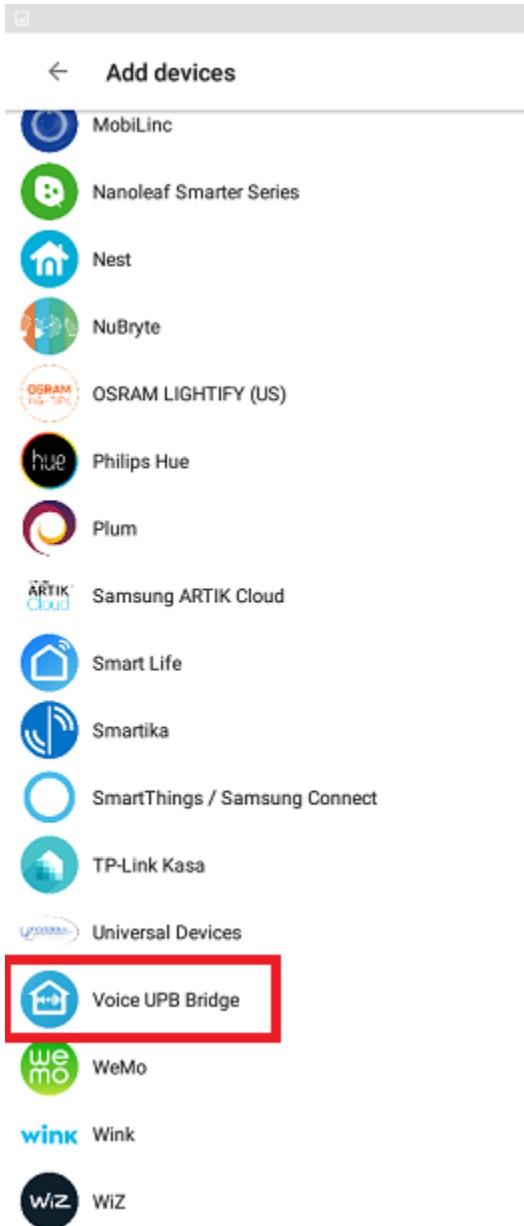
The pictures and directions here are from the Google Home app running on a tablet. From a phone, the concepts are the same but what you see and the actions taken may be somewhat different.

To begin, start the Google Home application on your mobile device and select from the slide-out left menu “Home Control.” On a phone, this will be in the app menu as “Home Control”





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Click the plus sign (“+”) at the lower right to get to the “Add Devices” page. Tap on “Voice UPB Bridge” to begin the process.

The Google Home application then redirects to the HCA Cloud web site and several pages display that lets you log into your cloud account and then authorize access.



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93% 9:06 AM

https://oauth.voiceupbridge.com

Login

Already a UPB Bridge user?

Login in here:

Bridge Name: Test102

Remote Code:

Sign in

New to UPB Bridge?

The bridge that connects your UPB devices to next generation IoT technology
[Learn More.](#)

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Enter your HCA Cloud account user name and password and “Sign in”.

93% 9:08 AM

https://oauth.voiceupbridge.com

Menu

UPB Bridge User:

Test102

Google Home UPB is requesting access to your account.

Do you approve?

By signing in and allowing access to your account, Google Home UPB will have access to the following services and information.

- View design information including devices, programs, rooms and schedules
- Obtain the state of devices, programs and rooms.
- Change the state of devices, programs and rooms.
- Remotely access your Home Automation system to retrieve settings.

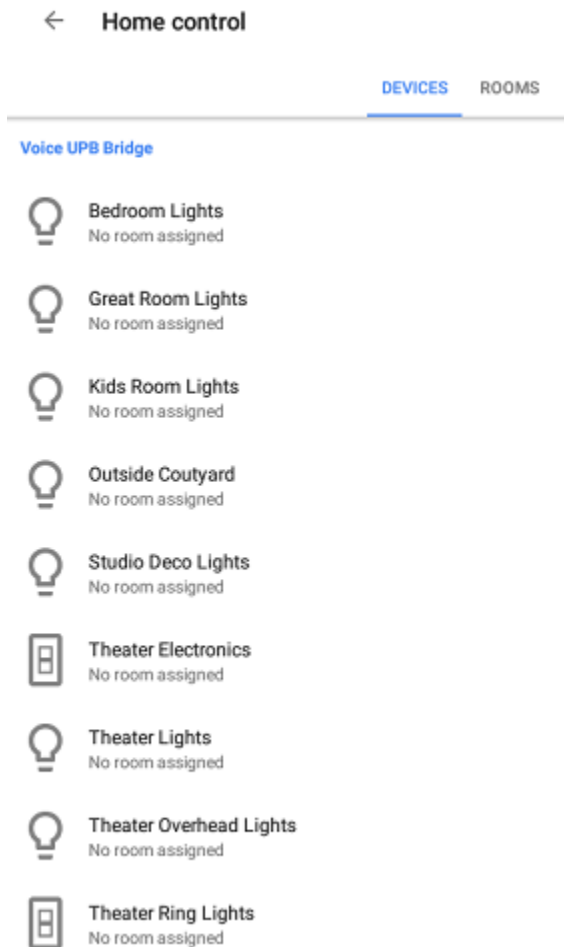
Allow

Press the “Allow” button to continue.



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Google-Home then displays a popup that says “Linking your Voice UPB Bridge Account” and during the time that the popup is on the screen it is connecting to your HCA Server and getting the list of devices you have enabled for voice control. The list of devices then displays.



It is not recommended that you assign devices into rooms – read the “Important facts” on the next page. At the top right of the display is a button that says “done”. Press that to complete.

Unfortunately, there appears to be no way to say “refresh my devices”.

The only way to get Google Home to refresh the list of devices – for example, if in HCA you made a change to a voice name or added or removed a device or program – is to “Unlink” the Voice Bridge action and begin again.

In the main “Home Control” area, click on the “+” and in the “Linked devices” click on “Voice UPB Bridge” and in the popup press the “Unlink” option. Then you have to begin add to add the Voice UPB Bridge action and follow the steps as you did before.

Once you have it all setup, you can control devices like this:

- *OK Google, Turn On <device name>*
- *OK Google, Turn Off <device name>*
- *OK Google, Dim the <device name>*
- *OK Google, Brighten the <device name>*
- *OK Google, Set <device name> to 50 percent*
- *OK Google, Dim <device name> by 20 percent*
- *OK Google, Brighten <device name> by 20 percent*



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Everything to Google-Home is a device even groups and programs so they can be controlled as well in the same manner. If you have a program you want to start you can say:

OK Google, Turn on <program name>

If the program has both ON and OFF triggers then you can start it with the OFF trigger by saying:

OK Google, Turn Off <program name>

For more about program control, this tech note has greater detail. It's about Alexa, but the same methods apply to Google-Home as well.

www.hcatech.com/download/V14/Doc/TechNotes/TechNote_100_AlexaControlForPrograms.pdf

Several very important facts about Google-Home you must know!

As of September 21, 2017, there are two major issues that you must be aware of with Google-Home. None of these issues are with HCA but with the Google Home implementation. We hope they are corrected soon.

Issue #1: Room assignments ignored.

As you can see from the above picture, Google-Home has the concept of devices and rooms and provides you a way to assign your devices into rooms. In fact, when the Google application contacts the HCA Server to enumerate the devices it will be controlling, the HCA server told it what rooms the devices are in but Google-Home doesn't take that info into account and leaves the devices unassigned to rooms. This has several unfortunate consequences.

In HCA, a device names don't have to be unique within the whole design but only within a room. It is perfectly acceptable to have a device called "Lights" in the kitchen and a device called "Lights" in the den. Let's take those two devices as an example: "Kitchen-Lights" and "Den-Lights"

Since Google-Home doesn't take the HCA Server direction as to what rooms to place devices into you can't use the names "Lights" in both cases as all names must be unique if they are not assigned to rooms. If Google-Home put them into rooms like it was directed to, then all would be well but it doesn't. So you have to configure their voice names as "Kitchen Lights" and "Den Lights".

If you subsequently used the Google-Home application to assign them into rooms, the names you would have to speak would be "Den Den Lights" and "Kitchen Kitchen Lights". Clearly this isn't good.

The workaround for now, is to not assign your devices into rooms using the Google-Home application.



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Issues #2: Device control and room control often mixed up.

With rooms, Google-Home can perform operations to control all devices in a room on or off with a single voice command. The problem is that their language processor often gets in wrong. In the example list of devices above there are three devices that start with “Theater”. Even though they are not assigned into rooms, Google-Home assumes them all to be in a room called “Theater” so when you say “Turn off Theater Lights” it will turn off not only “Theater Lights” but also “Theater Overhead Lights” and “Theater Ring Lights”. It doesn’t – but should – match what you say to the list of devices and if an exact match is found use that rather than performing a room operation.

The workaround is to keep the names you use as separate as possible and avoid using the word “Lights”.

##end##