

Environmental Control User Guide

*Designed to Assist with the Setup and Use of Environmental Control
Technologies for Amazon Echo devices*



Acknowledgments

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Introduction

Getting Started

The purpose of this instructional protocol is to provide a useful and easy-to-use support tool to help one successfully set up their Amazon Echo device, as well as assist in ensuring that the device can be properly used to perform the actions or tasks that you want to do. It is important to note that issues or technical problems may arise when using these devices – as is common among all technologies. Thus, our goal is also to provide a repository of resources and other relevant information that can help you resolve any problems that might occur so you can gain the most benefits from these smart and connected technologies.

What is an Amazon Echo?

The Amazon Echo is just one device in a category of what are known as voice-activated digital home assistants. Generally, these smart devices allow a user to interact with a virtual assistant known as *Alexa*. *Alexa* can assist you in playing music, making calls, setting music alarms and timers, asking questions, controlling other smart home devices, as well as with other more specific tasks that can be added to the device through what are known as Skills.

Skills can be thought of similarly to applications like those found on a smartphone. You can enable the Skills on your device and unlock a variety of new features depending on which Skill is added. Examples include Skills that assist with learning health information, playing games, or nutrition tracking.

Amazon Echo devices come in many shapes and sizes. For example, some Amazon Echo devices have visual displays (e.g., Echo Show, Echo Spot) that complement the information that *Alexa* is providing and can even passively provide useful information throughout the day such as the time, weather, reminders, and news alerts. Overall, the purpose of the Amazon Echo is to be a supportive tool that aids one in completing the tasks they most desire. How it can and will be used will vary by person, and the goal of this instructional protocol is to provide an easy-to-use and useful companion in helping individuals maximize the potential of the device within their daily lives.



An Overview of Amazon Echo devices

Smart Speakers



Echo



Echo Plus



Echo Dot

Smart Speakers with Displays



Echo Show



Echo Show 8



Echo Show 5



Echo Spot

The devices shown above provide a glimpse at the variety of Amazon Echo devices that can currently be purchased. Despite the clear differences in appearance and form-factor, these devices all utilize *Alexa* in the same manner to provide the information or desired actions of the user. Thus, while this instructional protocol focuses on the two of the more common Echo devices sold (Amazon Echo and Amazon Echo Show), you will find a similar setup and use process across all devices.

How Do Digital Home Assistants like the Amazon Echo Work?

As digital home assistants are activated by one's voice and may have a camera on the front of the device to allow for capturing photos or communicating with others, some may be concerned with how these devices work. This is especially due to their imbedded nature in one's home, and the potential concern that they may capture private moments or events in your life that you would prefer them not to do. Although the design of these devices may vary from developer to developer, there are some general similarities among them regarding how they record and process information.



To address how they work, it is important to answer a key question about their functionality:

Are digital home assistants always recording me?

The answer is **no**, digital home assistants are not *always* recording you. One way to understand how these devices work is to think of your digital home assistant as a friend who is reading a book in your room. The friend is attending to the content of the book and paying little attention to the surroundings. However, if you said your friend's name, they would stop reading and start listening to what you say. Digital home assistants work in a similar manner. They are passively listening only for the word(s) that tell it to listen (e.g., "*Alexa*" for Amazon Echo devices). Once they hear this phrase, they then begin recording what is said, which is then sent to remote servers for processing (i.e., converting speech to text and then making sense of the text), after which the information is sent back to your home network for actions to be completed.

Although some may be skeptical of the privacy of such a transaction, the devices are not recording you as this is easily proven by analyzing the amount of data, or information, your device is continuously sending and receiving. Audits of this information have shown that, other than simple device status data, it is not sent for processing unless a request has been made. Additionally, users can delete all stored voice recordings through their application, across all major digital home assistant platforms.

Connecting and Using Smart Lights with your Amazon Echo

Smart lights are one of the most popular devices to use with the Amazon Echo. They enable you to simply use your voice to turn any connected lights on or off, control their brightness, and, if compatible, to change the color of the light. Generally, smart lights are quite easy to install as they are structurally the same as current LED bulbs and have the same threading that will allow you to insert them into any compatible light socket. Some smart bulbs must be controlled by an independent “hub” that connects to your router either directly with an ethernet cable or wirelessly through your WiFi network. This hub communicates with your bulbs and delivers the commands from your Echo to the bulbs. However, other, newer versions use a wireless Bluetooth connection to connect directly to your Amazon Echo device, removing the need for a Wi-Fi hub. While this may be more accessible to some, they may have a reduced functional distance compared to WiFi hubs which provide a longer range of connection. For the following installation example, we are using Philips Hue Bluetooth-enabled bulbs, the most popular brand currently on the market. Although other brands may have slight differences in their physical appearance or functionality, the following instructions may be generalizable to their setup as well, with the primary differences concerning the bulbs’ application setup.

Some Examples of Philips Hue Smart Lightbulbs



Philips Hue White and Color Ambiance 2-Pack A19



Philips Hue White and Color Smart Button Starter Kit with Hub



Philips Hue Play White & Color Smart Light



Philips Hue 548503 Smart Light BR30 Bulb



Philips Hue Go White and Color Portable Dimmable LED

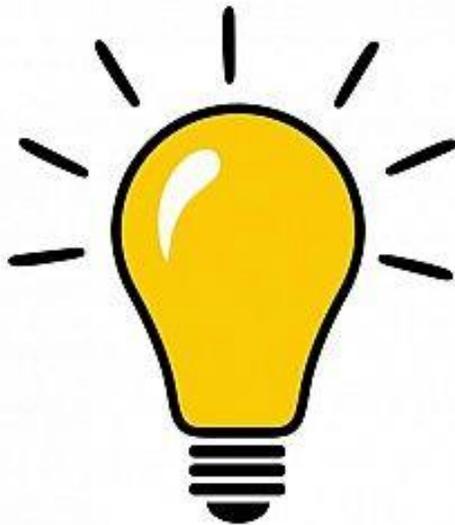


Philips Hue Gradient LightStrip 55"

Setting Up your Philips Hue Smart Lightbulb

To setup and use your Philips Hue smart lightbulb, simply follow the provided steps beginning on the next page. Please note that these technologies, and the the appearance of the software or applications that come with them, are constantly updated by their manufacturers.

Therefore, there may be slight differences between the following steps and your current application. We try our best to keep these guides updated but if there are differences, please use the following guide as a resource to help you set up the lightbulbs in their current form.



Step 1 of 16



First, press the home button on your device, as seen in the example picture. Some newer devices do not have a physical home button (circled in red). Instead, swipe up from the bottom center of the screen (shown in the yellow hand icon).

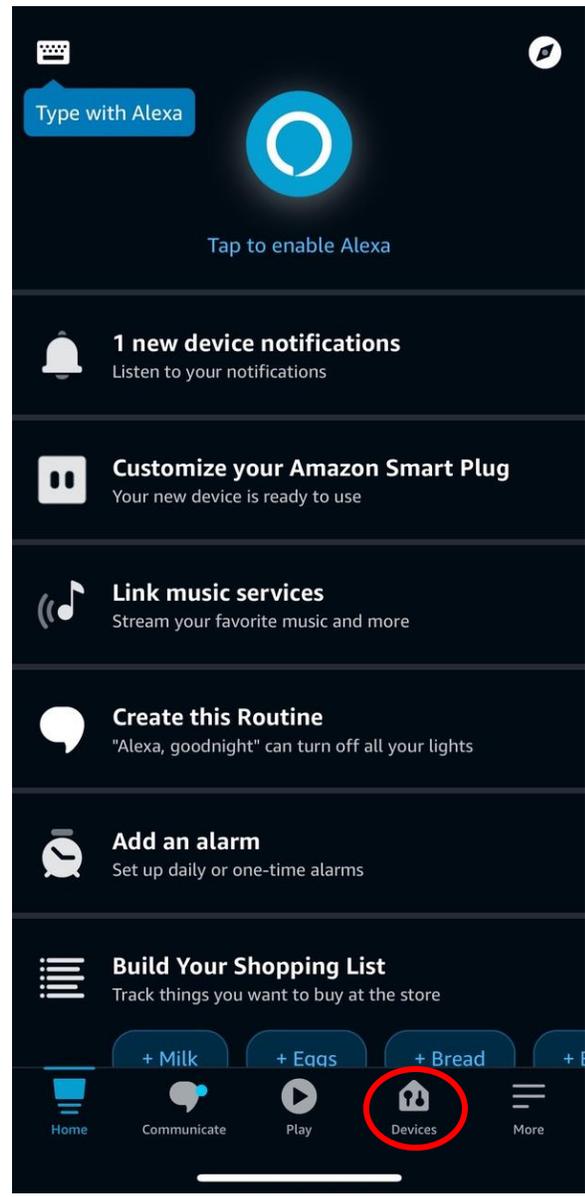
Pressing the home button will take you to the home screen where you will need to find the Alexa app on one of your home screen pages (see the icon below). Tap this icon (circled in green).



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of 16



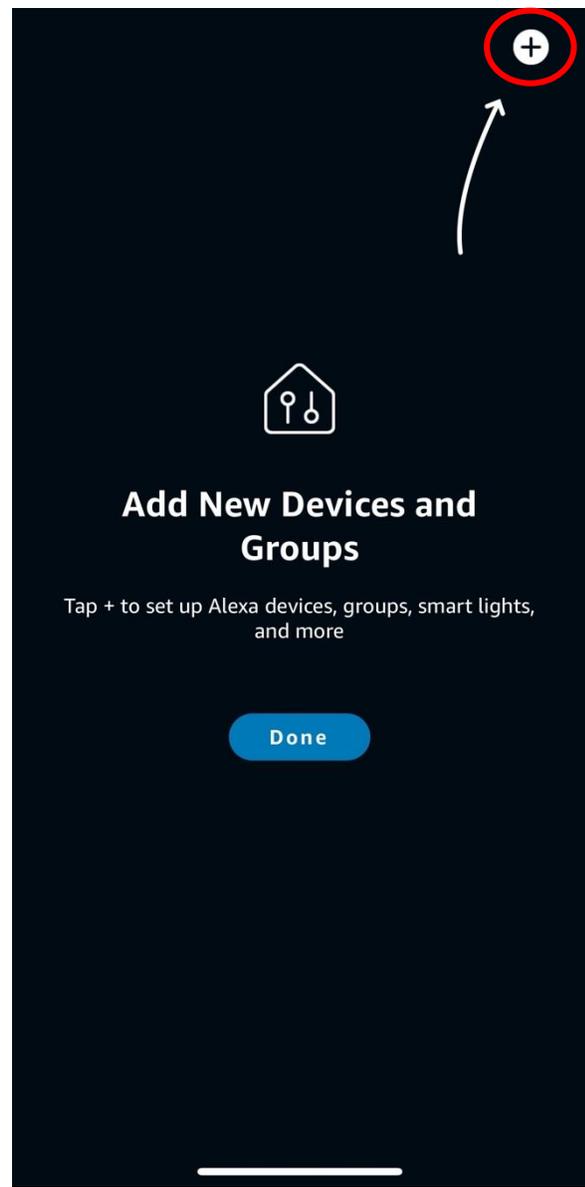
Once the app is open, you should see the screen similar to the example picture. Tap the “Devices” icon on the bottom right of the example picture (circled in red). It should look similar to this icon:



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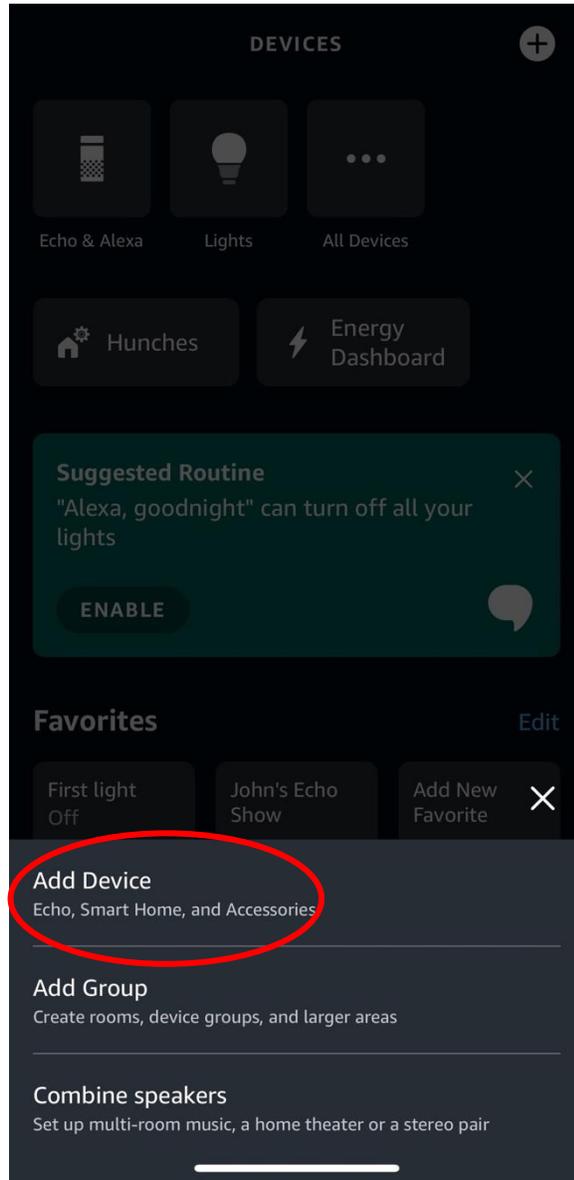
Click on the  icon on the top right of the example picture (**circled in red**). This will allow you to customize what devices the Alexa application, and in extension your Amazon Echo, is connected to.



Step 4
oxf 16



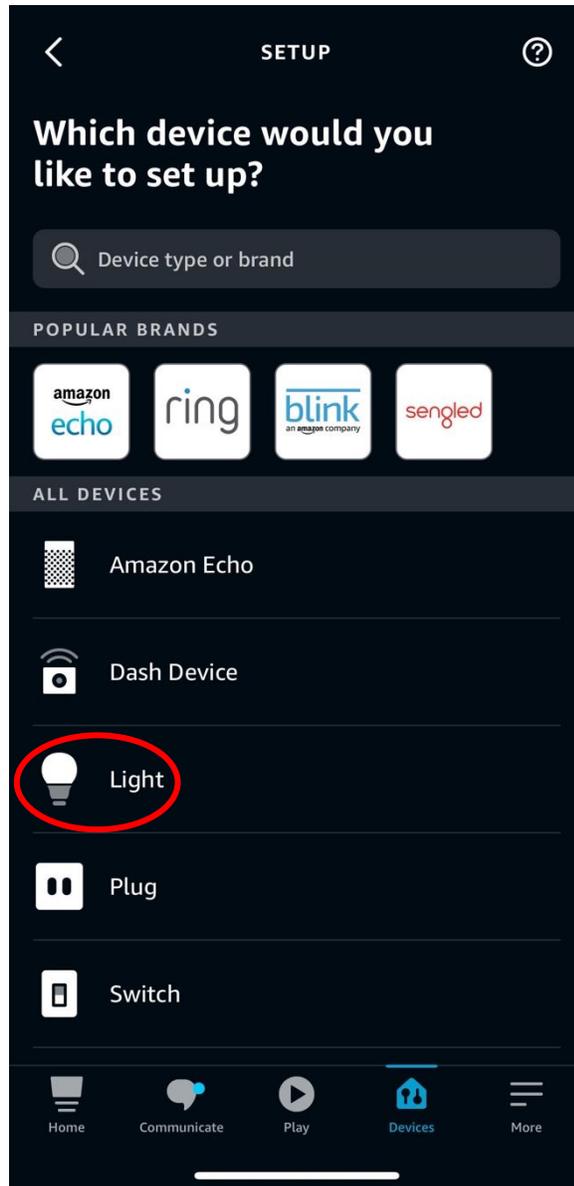
Tap “Add Device” (circled in red).



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of 16



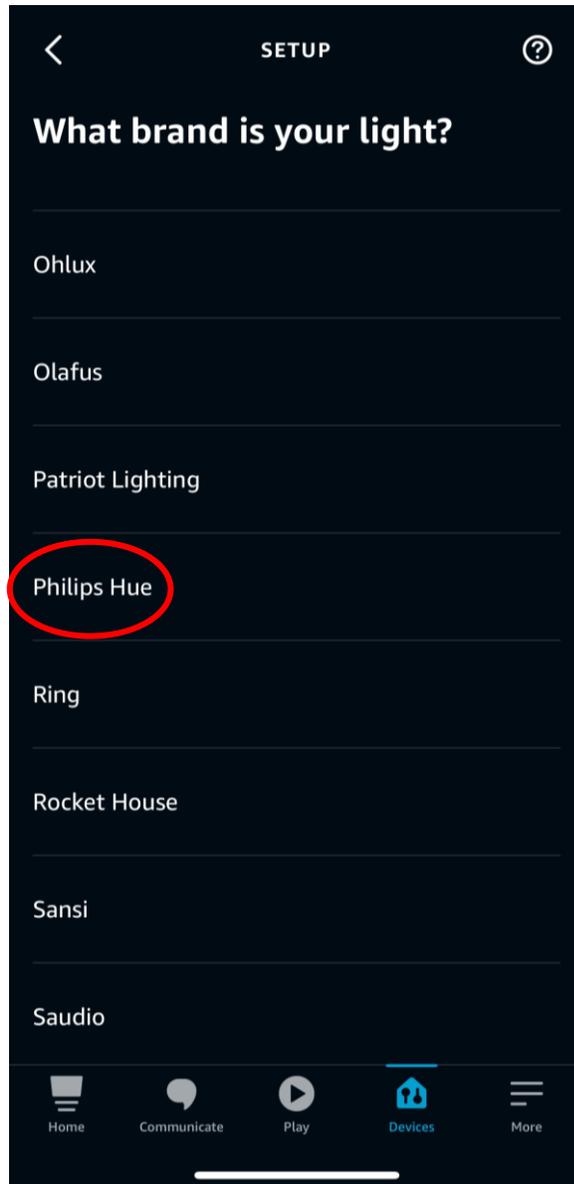
You will see a list of popular brands, followed by categories of devices that can work with Alexa. To add your Echo, tap “Light” under “ALL DEVICES” (circled in red).



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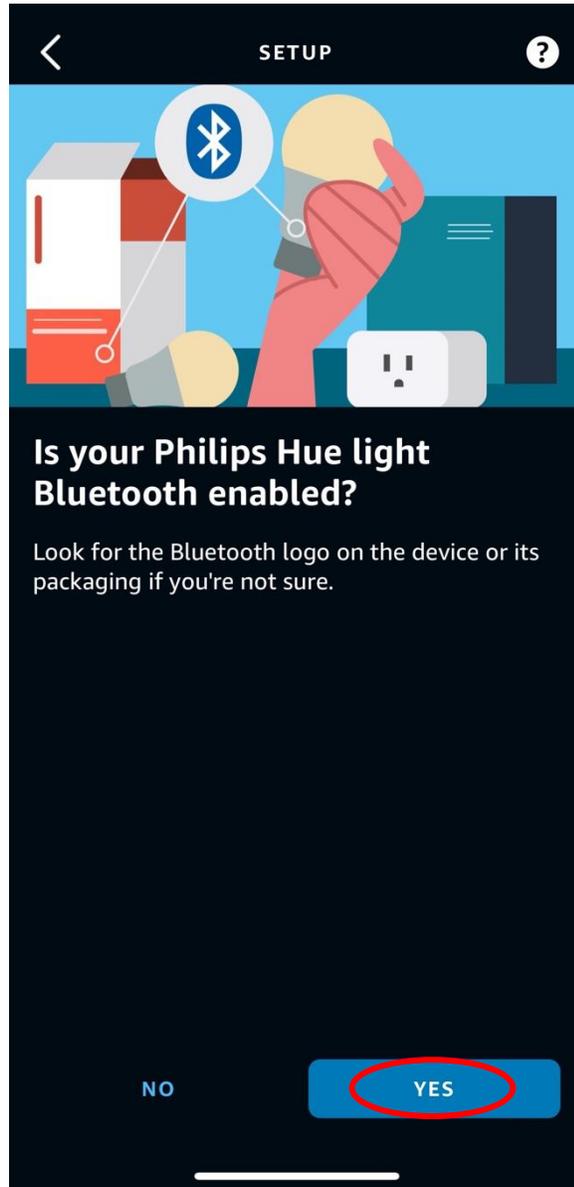
Select the brand of your plug. In this case, we are using the Philips Hue light. Scroll down and tap on "Philips Hue" (circled in red). If you are using another brand, tap the brand name of your light.



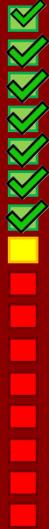
Step 7
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If your Philips Hue has a Bluetooth logo on the light bulb, tap on “YES” (circled in red) to continue setting up your lightbulb with your Amazon Echo device.

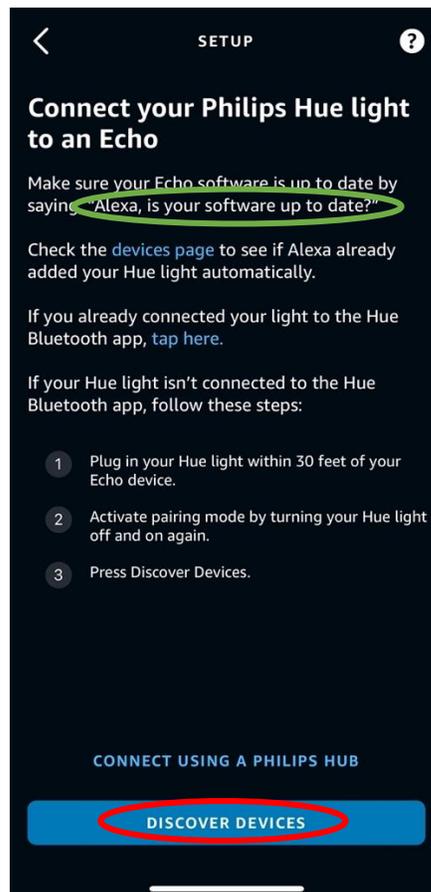


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of 16



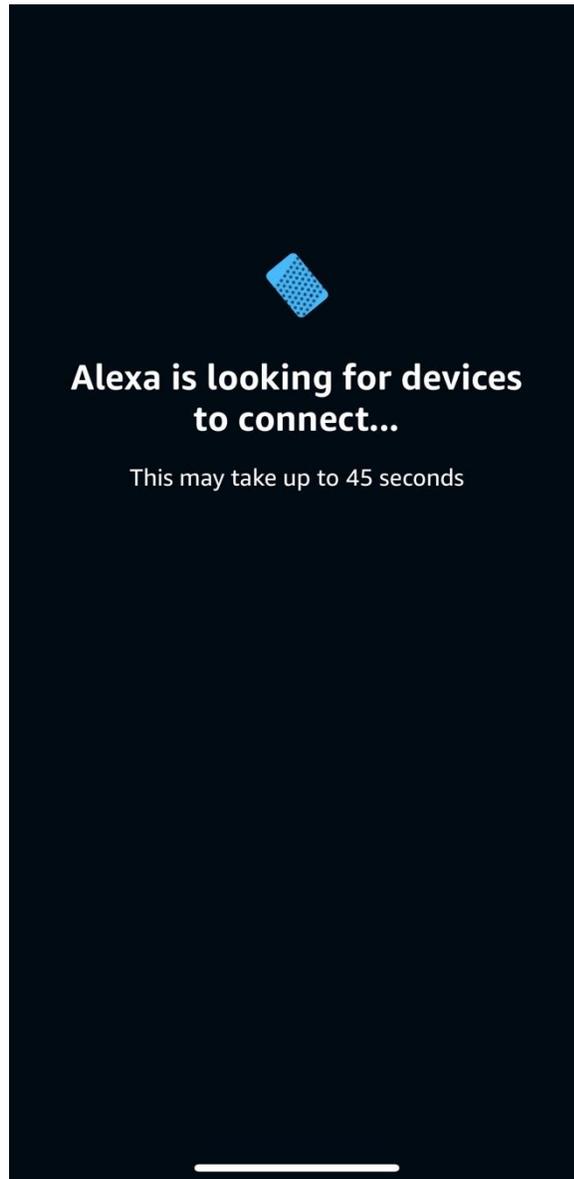
Your Alexa app is now ready to connect your Philips Hue lightbulb to your Echo Show. Make sure your Echo Show software is up to date by saying, “Alexa, is your software up to date?” (circled in green).

Also, make sure your Hue lightbulb is within 30 feet of your Echo device. Then turn it off and on again to activate pairing mode. Once done, tap on “Discover Devices” (circled in red) to search for your Philips Hue.



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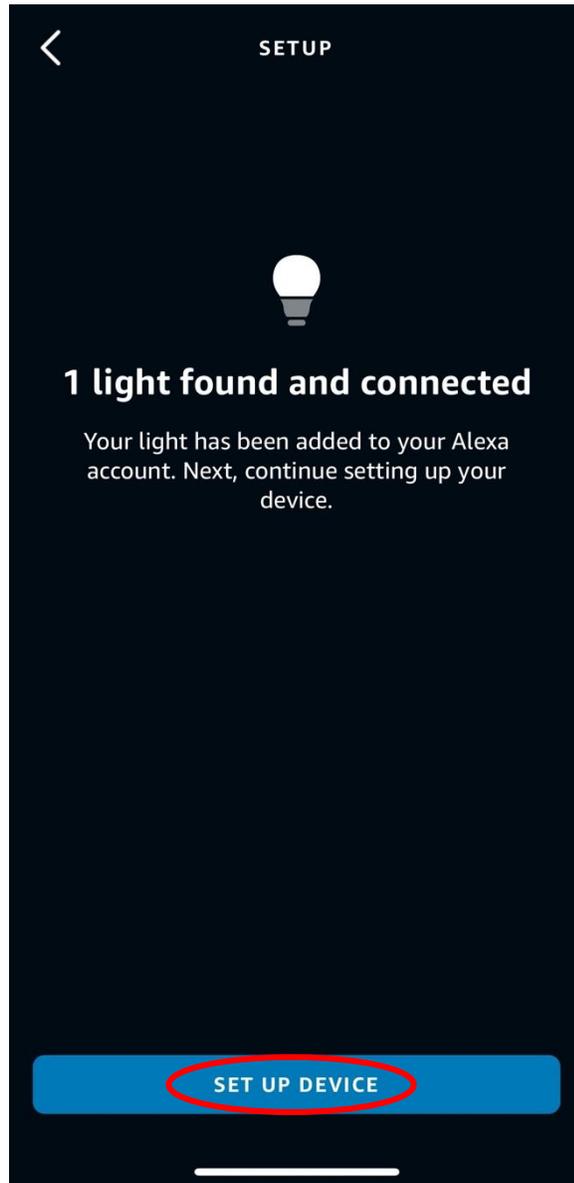
The Alexa App will now be looking for your Philips Hue light. Please wait as this process may take up to 45 seconds.



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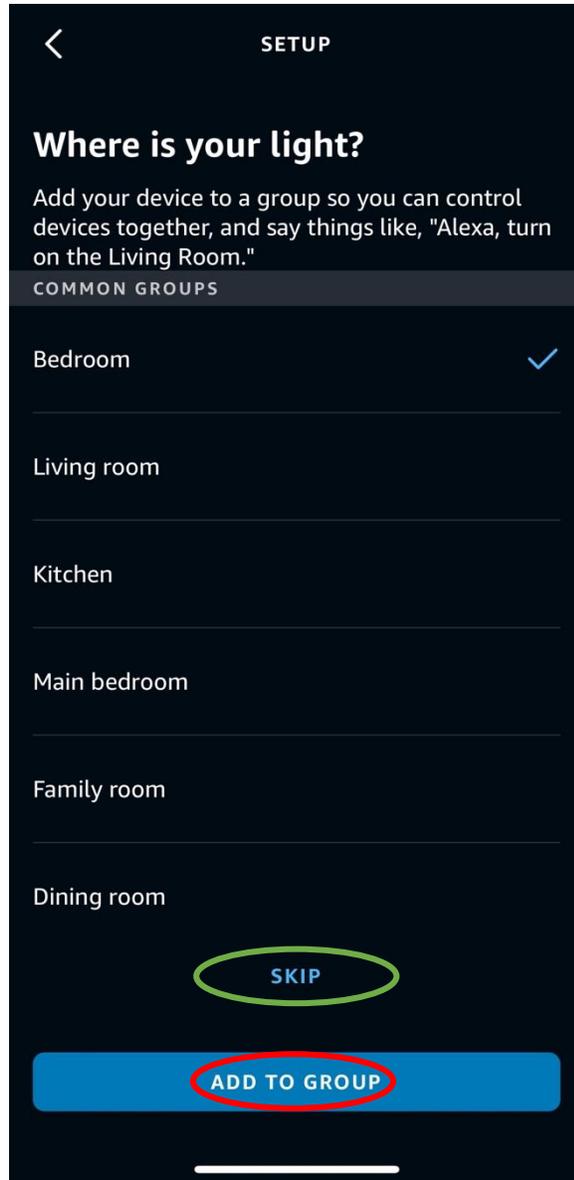
Your Philips Hue light has been added to your Amazon account. Please tap on “SET UP DEVICE”(circled in red) to continue setting up your device.



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You will now see a list of rooms that your Philips Hue light may be assigned to. Please tap on the room that your Philips Hue was installed in and then tap on “ADD TO GROUP”(circled in red). If you would like to skip this step, which is not recommended, please tap on “SKIP” (circled in green).



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Your light has now been added to your assigned room. You can now refer to your Philips Hue light using your room name and device type (i.e., Bedroom lights) instead of the device name. For example, one could say “Alexa, turn on the bedroom light” if your light is was assigned to the bedroom.

Please tap on “CONTINUE”(circled in red) to proceed with setting up your Philips Hue light.



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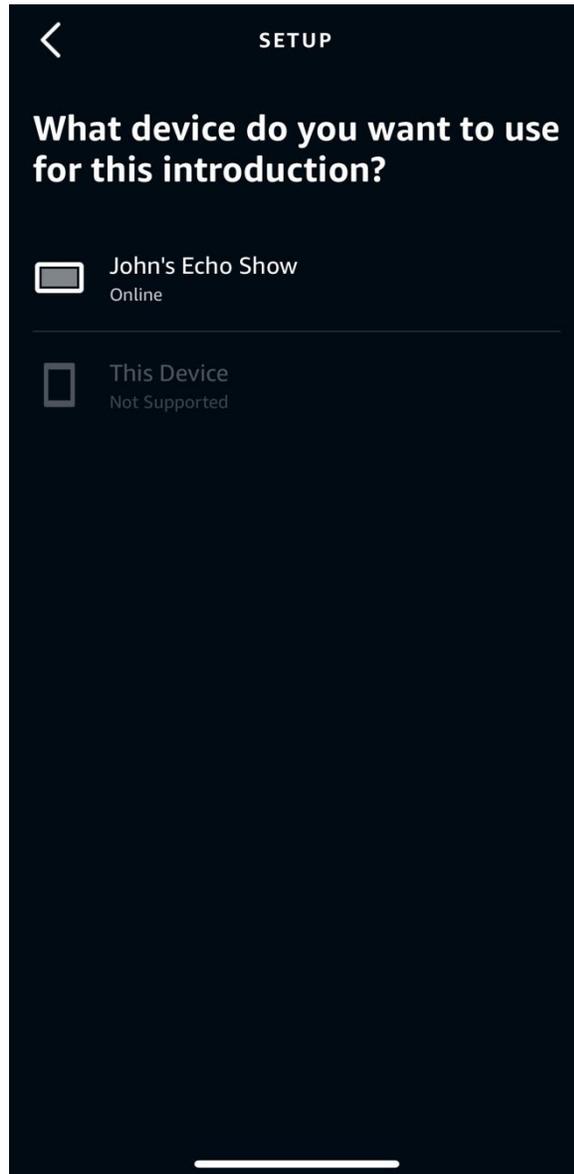


You can now practice a few commands with your Philips Hue lightbulb. If you would like to proceed with practice, tap on “GET STARTED” (circled in green). If you would like to skip this step, tap on “LATER” (circled in red). Skip to Step 16 if you want to skip this introduction, which is not recommended.



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You will now be able to choose the device that you would like to use for your introduction. Please tap on the device you prefer.



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You will now be able to play the introduction on your Echo Show. Please tap on "CONTINUE"(circled in red) to finish your set-up.



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Congratulations! You have successfully set up your Philips Hue light. Your Philips Hue light is now ready for use. Tap on “DONE”(circled in red) to finish your set-up.



Using your Smart Lights

Controlling your Smart Lights with your voice is easy. Below is a list of sampling of the potential voice commands that you can you with Amazon Echo now that you have successfully set up your Philips Hue Smart Lights.

Desired Actions	Voice Commands
Turn on all lights	"Alexa, turn on all the lights"
Turn off all lights	"Alexa, turn off all the lights"
Turn on lights in a specific room	"Alexa, turn on all the lights in _____" (insert desired room name)
Turn off lights in a specific room	"Alexa, turn off all the lights in _____" (insert desired room name)
Turn all compatible lights a specific color	"Alexa, turn on all the lights to _____" (insert desired color)
Turn all compatible lights a specific color in a specific room	"Alexa, turn on all the lights in (<u>room name</u>) to _____" (insert desired color)
Turn all lights to a preset scene	"Alexa, turn on _____ scene" (insert desired scene name)
Turn all lights to a preset scene in a specific room	"Alexa, turn on _____ scene in (<u>room name</u>)"

Setting Up your Amazon Smart Plug with your Amazon Echo

Smart plugs allow one to use their Amazon Echo or other digital home assistant to power the device on or off simply using their voice. For example, say one would like to automatically turn on an oscillating fan with a voice command. When the fan is connected to a smart plug that has been properly configured, one may simply tell Alexa to turn the device on as long as the fan is on and set to the desired speed. When told to turn off, the smart plug will cut the power to the device – despite the fact that its switch is still on (this is not harmful to the device or the safety of your home) – and it will automatically turn off.

Smart plugs are installed simply by plugging them into a power outlet and successfully ensuring they are connected to your wireless network, which is generally done through a smartphone application. It should be noted that only devices which has a physical “on” and “off” switch will work correctly with these plugs. For the following instructions, we used Amazon’s smart plug, but the setup should be similar across the different brands and versions.

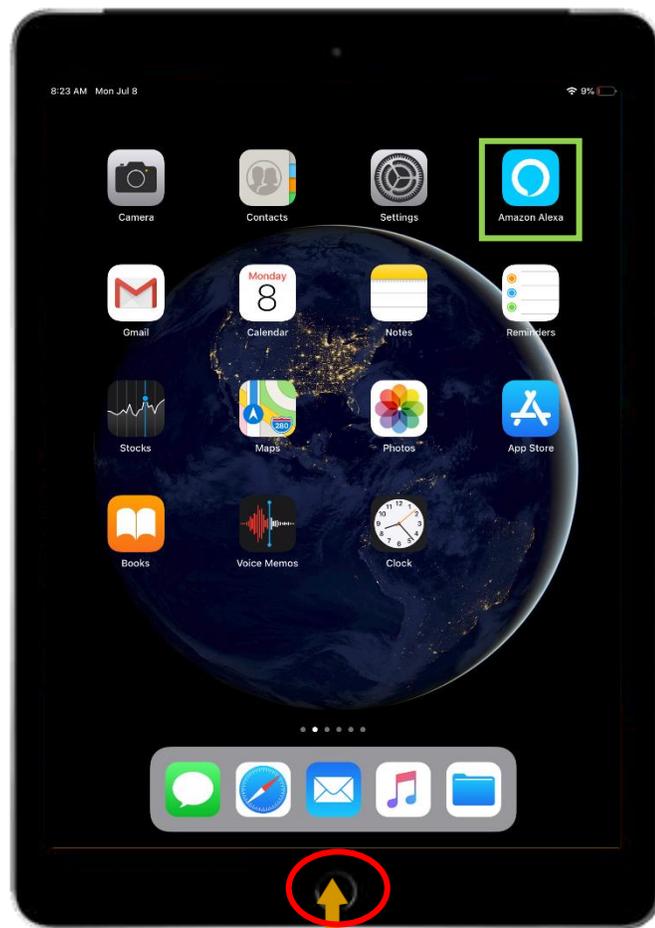
Please ensure your smart plug is plugged into the desired outlet prior to beginning the following setup instructions.

Step 1
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Press the home button on your device, as seen in the example picture. Some newer devices do not have a physical home button (circled in red). Instead, swipe up from the bottom center of the screen (shown in the yellow hand icon).

Pressing the home button will take you to the home screen where you will need to find the Alexa app on one of your home screen pages (see the icon below). Tap this icon (circled in green).

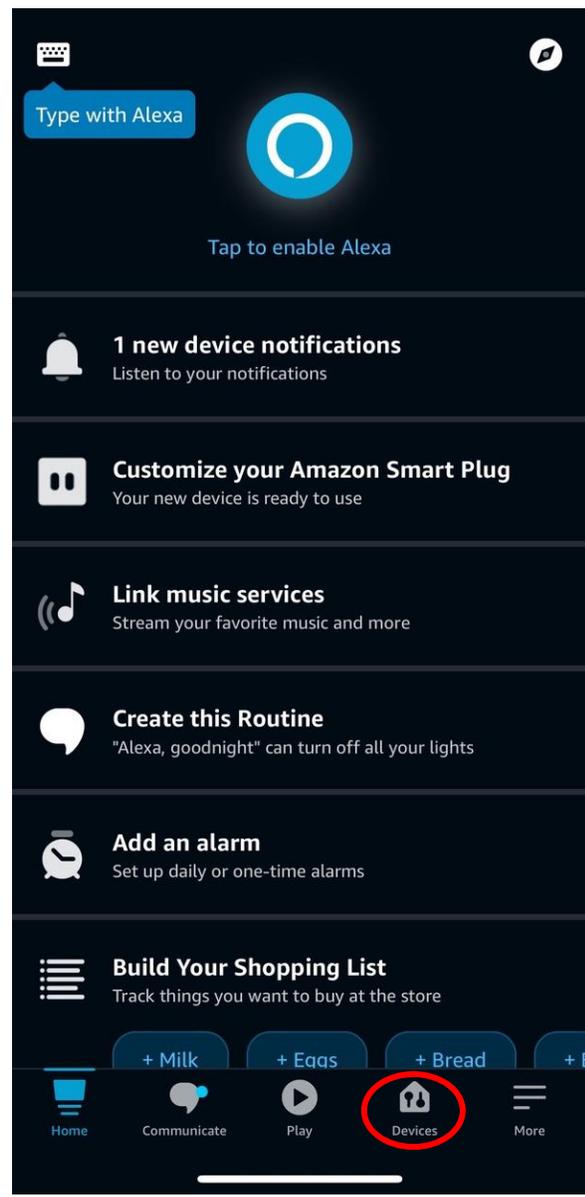


Swipe up
here

Step 2
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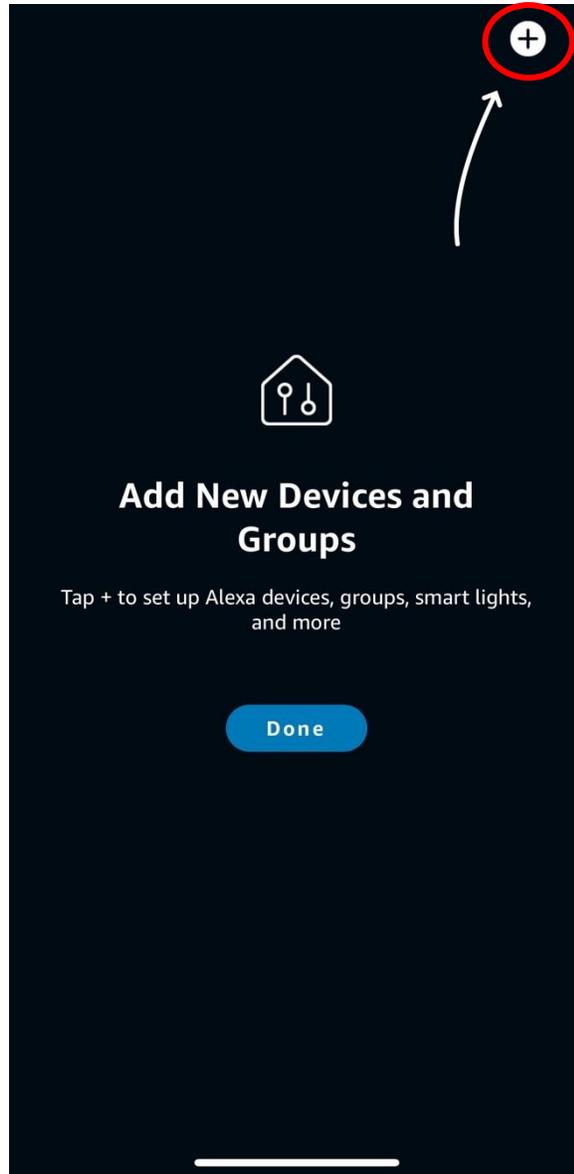
Once the app is open, you should see the screen similar to the example picture. Tap the “Devices” icon on the bottom right of the example picture (circled in red). It should look similar to this icon:



Step 3
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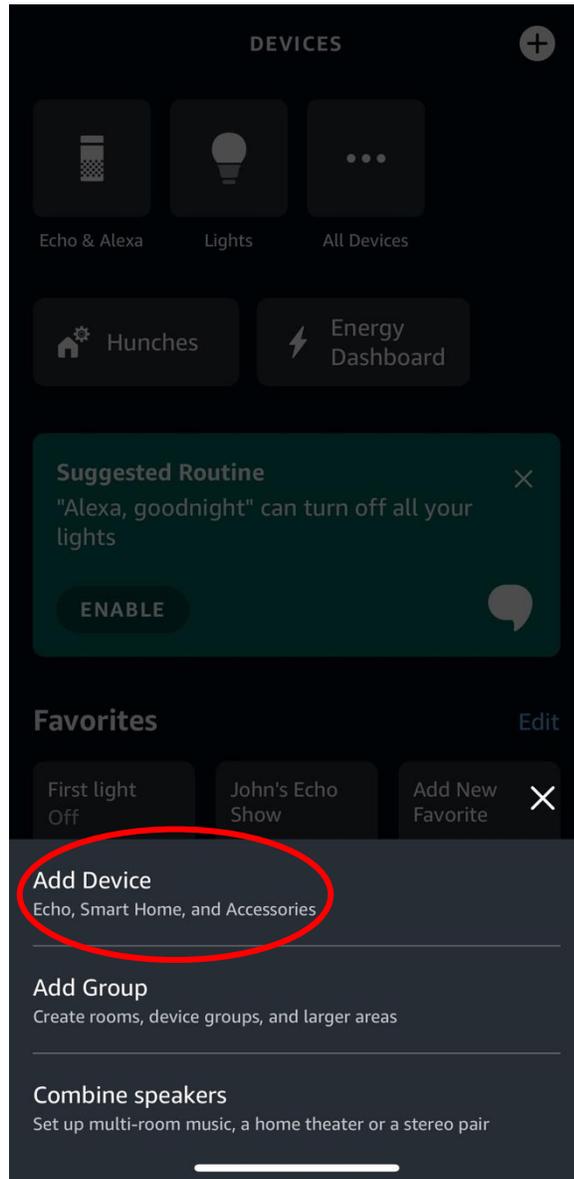
Click on the  icon on the top right of the example picture (**circled in red**). This will allow you to customize what devices Alexa application is connected to.



Step 4
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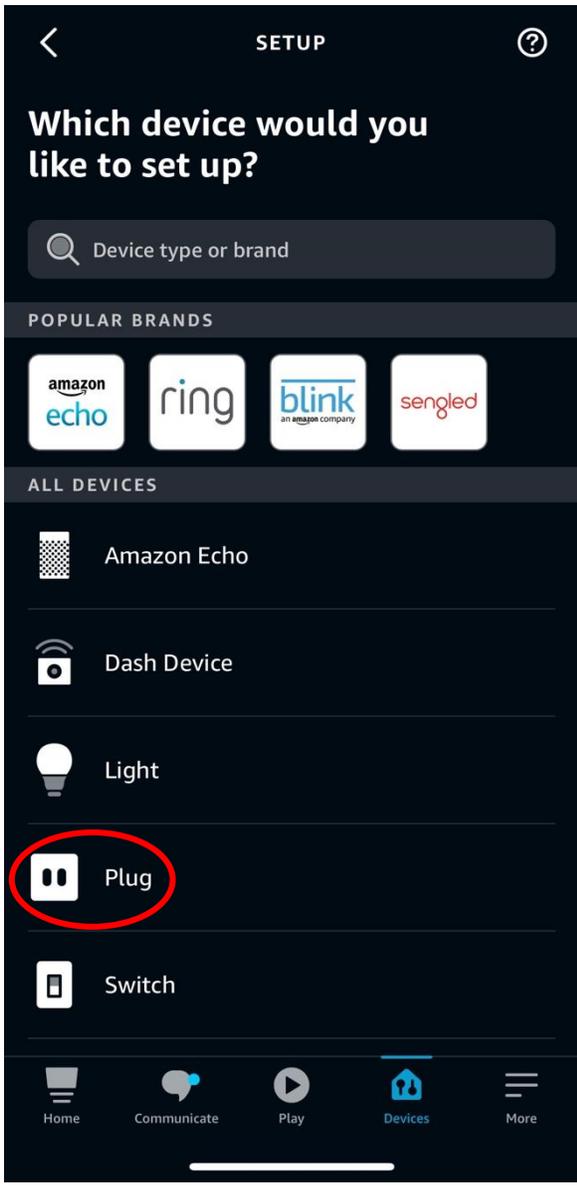
Tap “Add Device” (circled in red).



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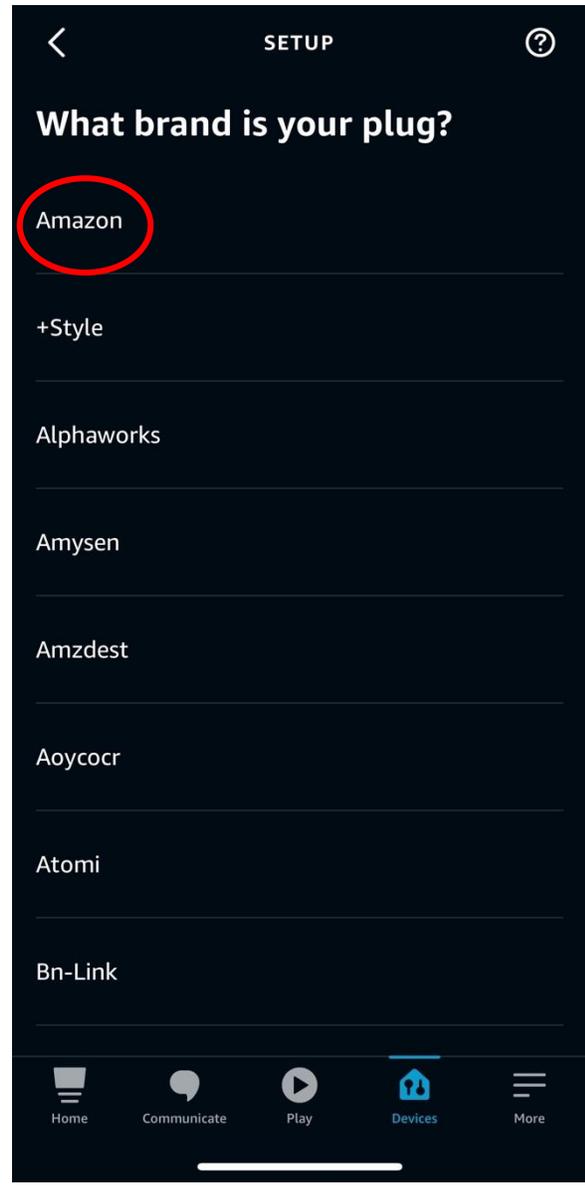
You will see a list of popular brands, followed by categories of devices that can work with Alexa. To add your Smart Plug, tap “Plug” under “ALL DEVICES” (circled in red).



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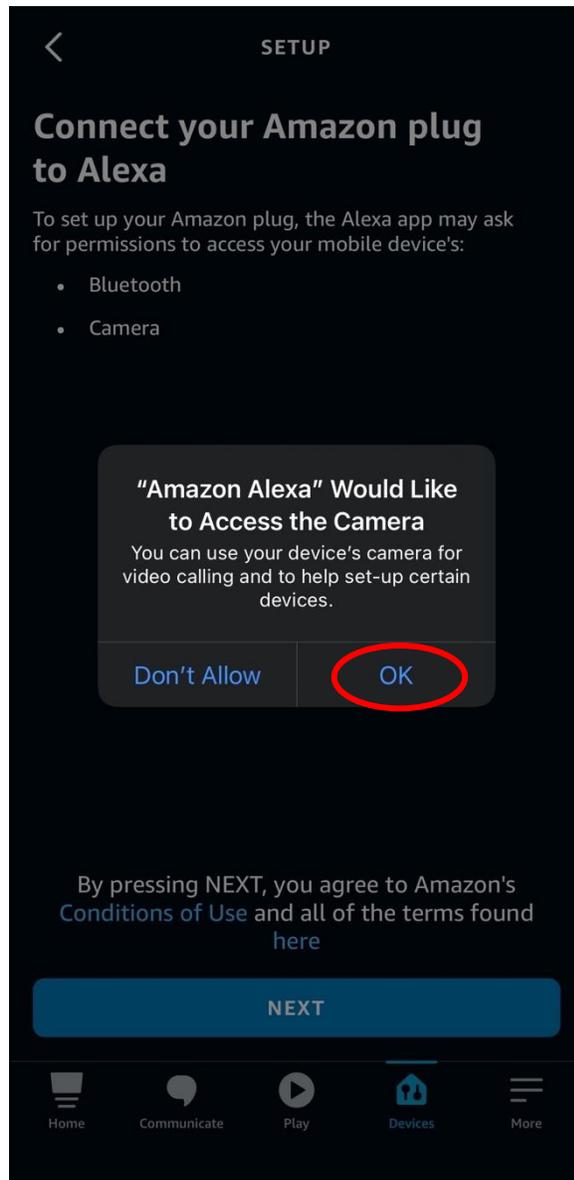
Select the brand of your plug. In this case, we are using the Amazon smart plug. Tap "Amazon" (circled in red). If you are using another brand, tap the brand name of your plug.



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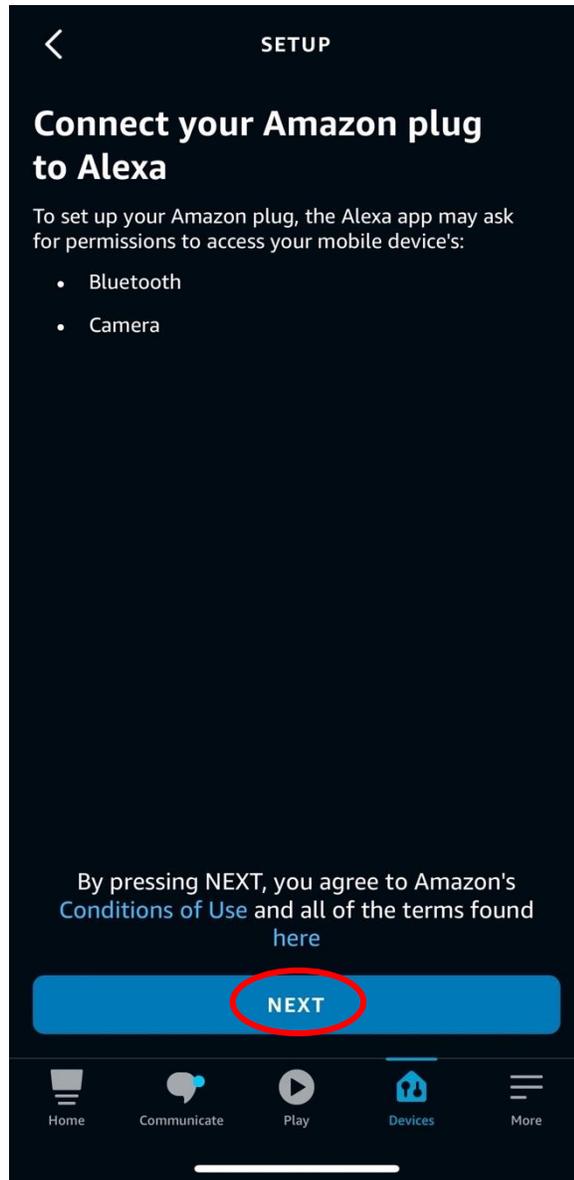
You will be prompted for permission to access your camera to continue the process to connect your Amazon Plug to Alexa app. Tap "OK" (circled in red).



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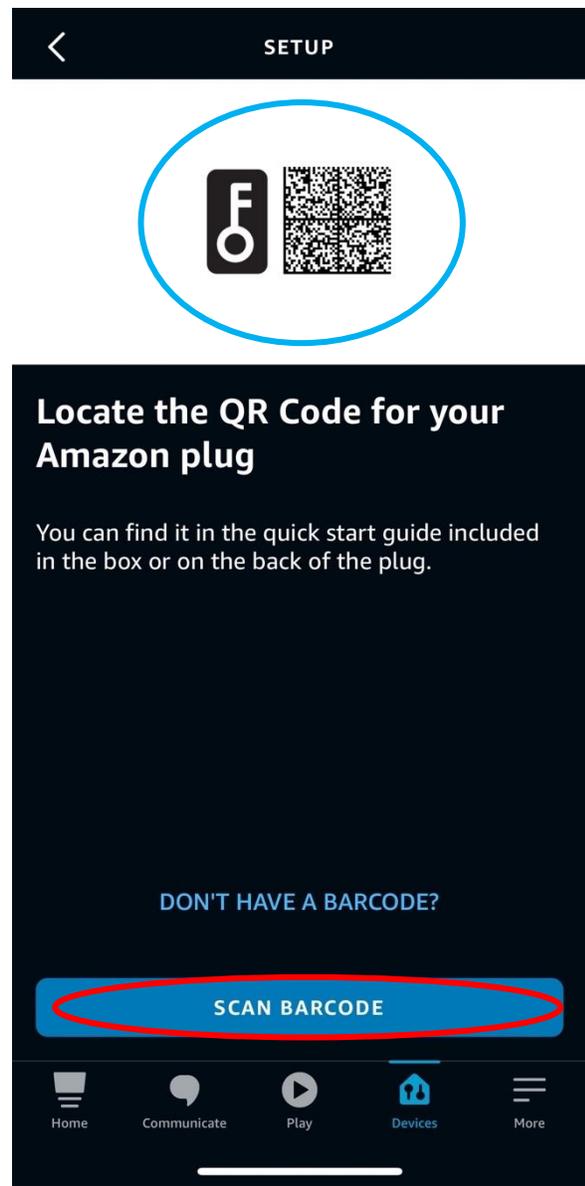
You should see the steps to connect your Philips Hue device to Alexa. In this page, you can tap on "[Conditions of Use](#)" and "[here](#)" to read more detailed information and terms. Tap "NEXT" (**circled in red**) to proceed the connection process.



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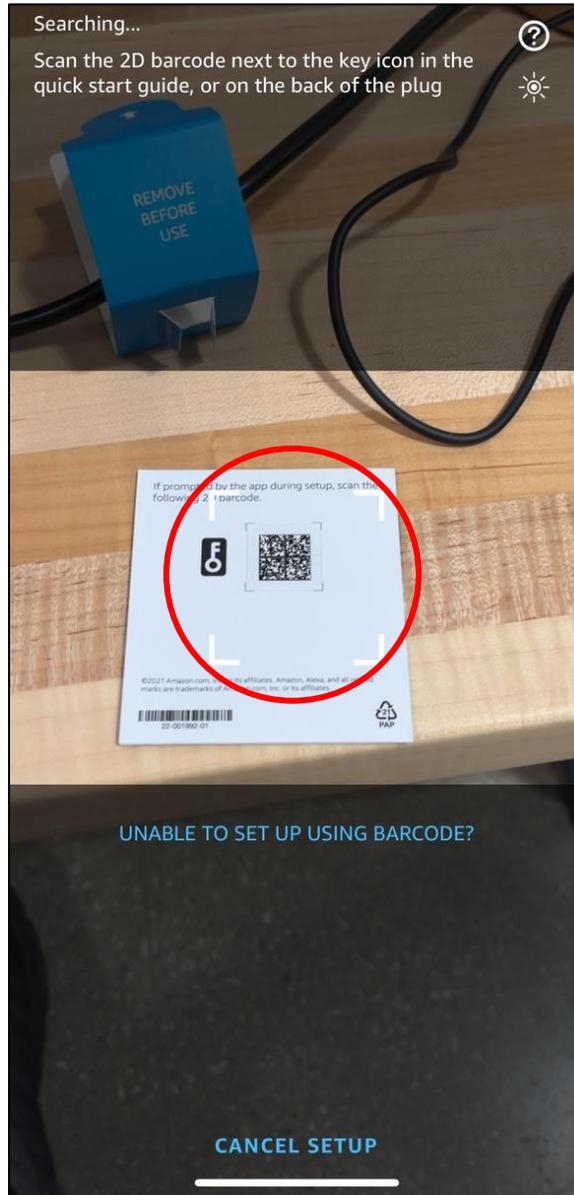
Find the QR code (see the picture circled in [blue for reference](#)) on the back of your plug or on the quick start guide included in the box. Once you find the barcode, tap "SCAN BARCODE" ([circled in red](#)) to begin scanning.



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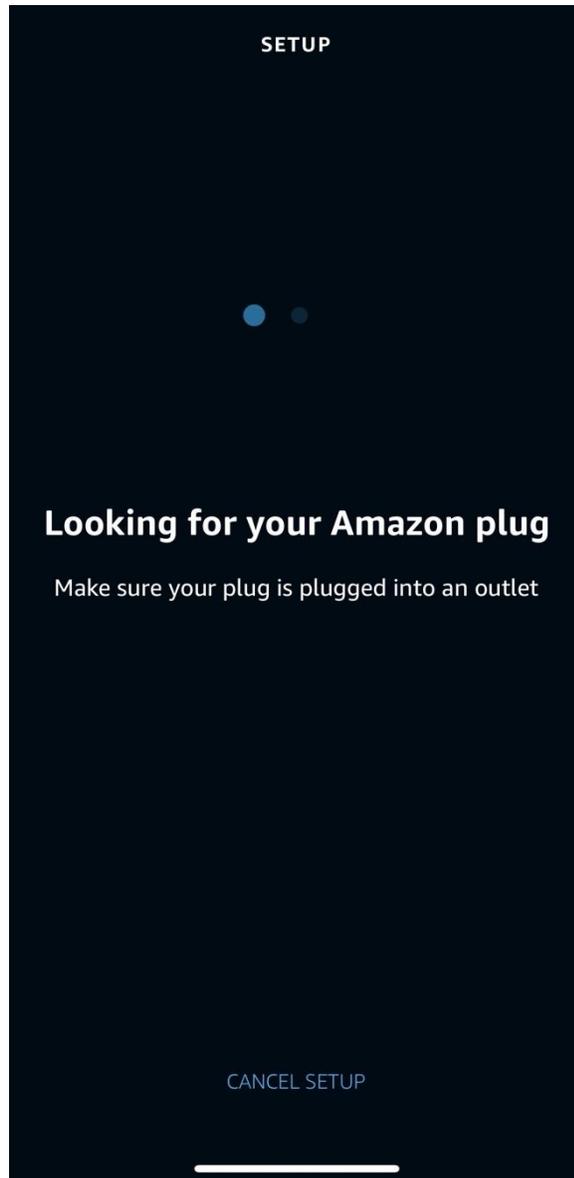
You should see four white square corners on your screen (circled in red). You should now be able to scan the QR code by pointing your device's camera to the QR code at the back of your plug or on the back of the quick start guide (make sure to position the QR code inside the white square corners).



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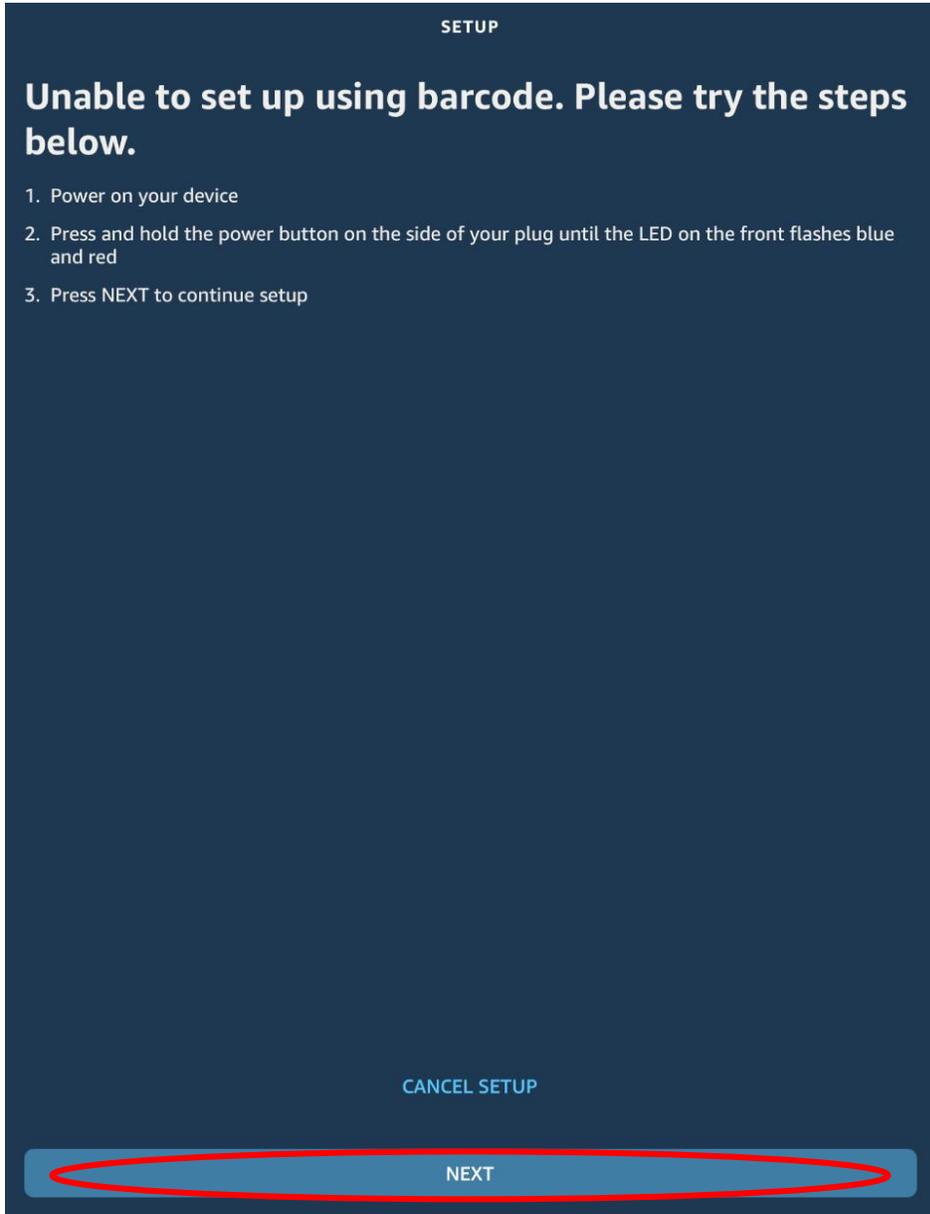
Once you have scanned the QR code, the Alexa application will begin looking for your smart plug. Please be sure it is plugged in the desired outlet.



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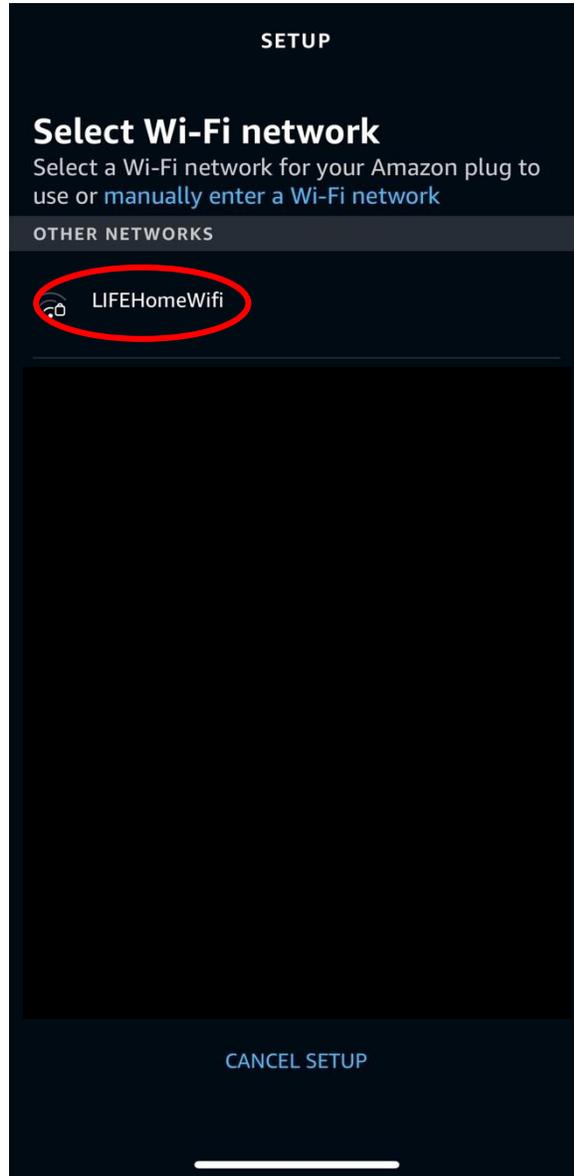
If the Alexa application was unable to connect with your plug using the QR code, you should see a screen similar the example picture below that describes the steps to connect your plug. Follow the steps and tap "NEXT" (circled in red) to proceed. If it was able to find the smart plug, you can ignore this step and proceed to the next one.



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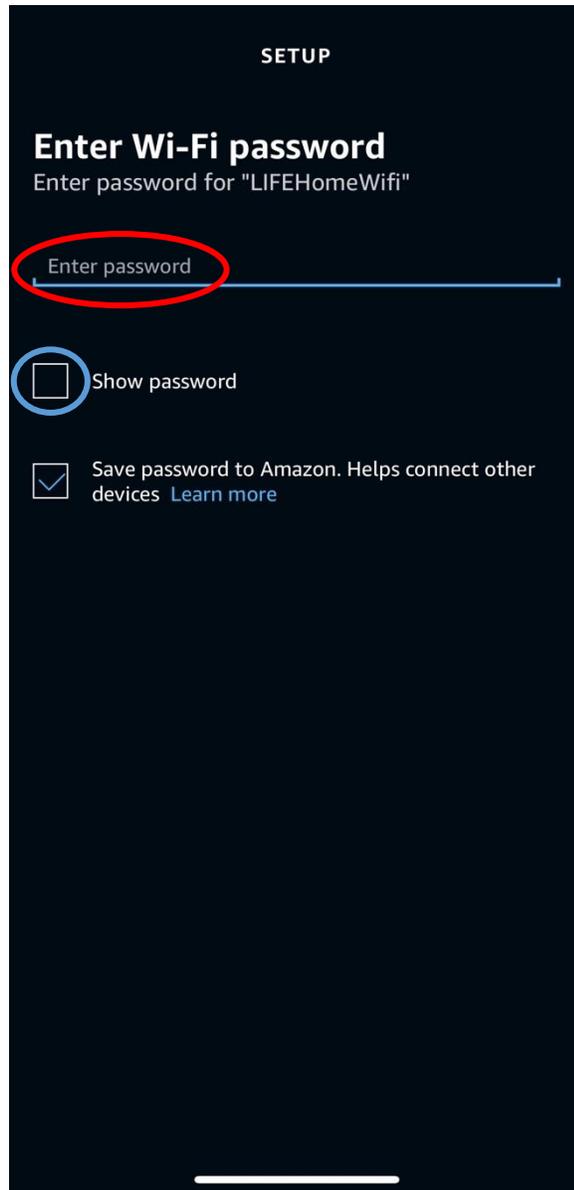
Select the Wi-Fi network that you want to use to connect your plug. Tap your network name (**circled in red**). Please note, your Wi-Fi network is unique to your living space. The Wi-Fi name shown below will not match your specific network.



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Tap on “Enter Password”(circled in red) and enter the password of your WIFI network. If you would like to see your password, click on the square on the left(circled in blue) which is next to “Show password”.



Step 15
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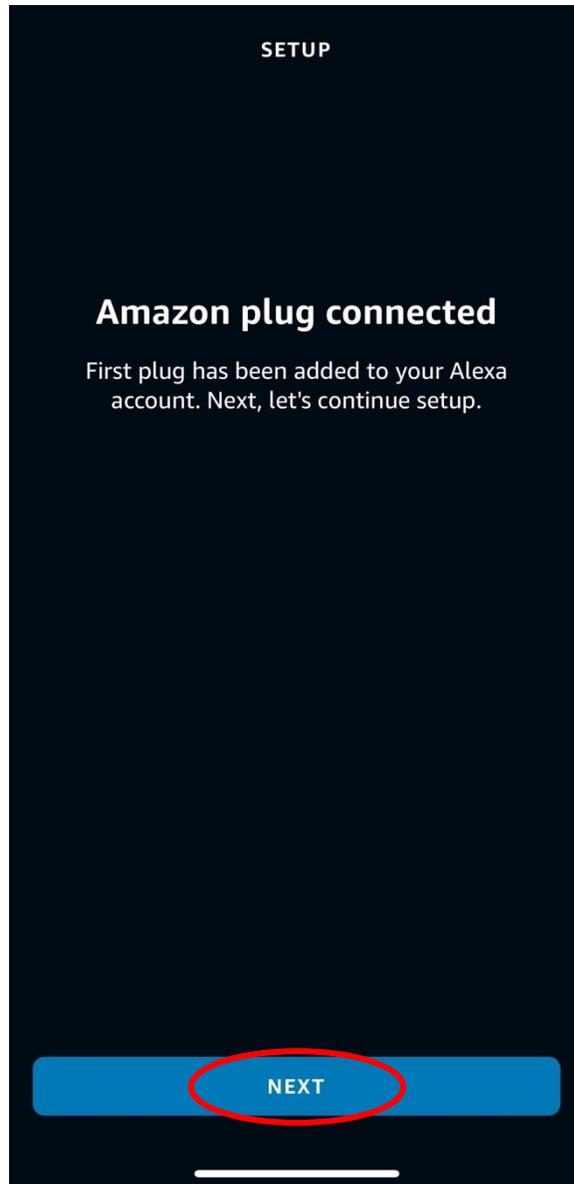
You should now see the screen similar to the example picture. The Alexa app is now connecting your smart plug to the Wi-Fi network. If you would like to cancel the setup, which is not recommended, tap on “CANCEL SETUP”(circled in red).



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Once the Alexa application has successfully found your plug, you should see a screen similar to the example picture below indicating that Alexa has connected to your plug. Tap on “NEXT”(circled in red) to continue.



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Alexa will now ask where your plug is located. Tap on the location that you would like to select, such as 'Bedroom' like shown below (circled in red). Once you have tapped on your desired location, tap on "ADD TO GROUP" (circled in green). If you would like to skip this step, tap on "SKIP" (circled in blue).



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of 22

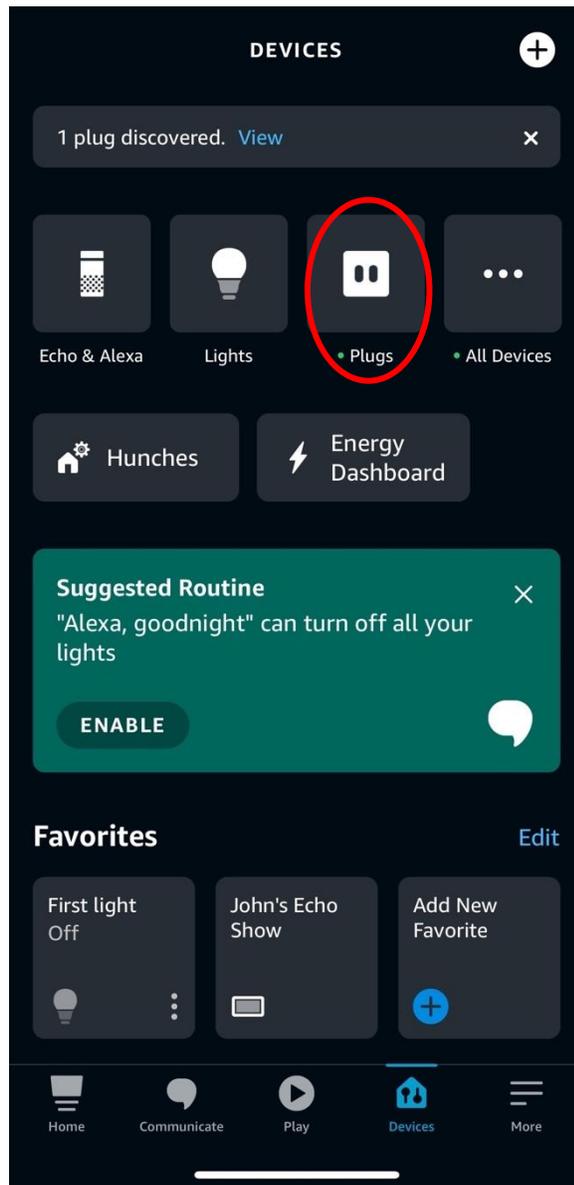
Your Smart Plug is now ready to use. Tap on "DONE" (circled in red) to go back to the main screen.



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of 22



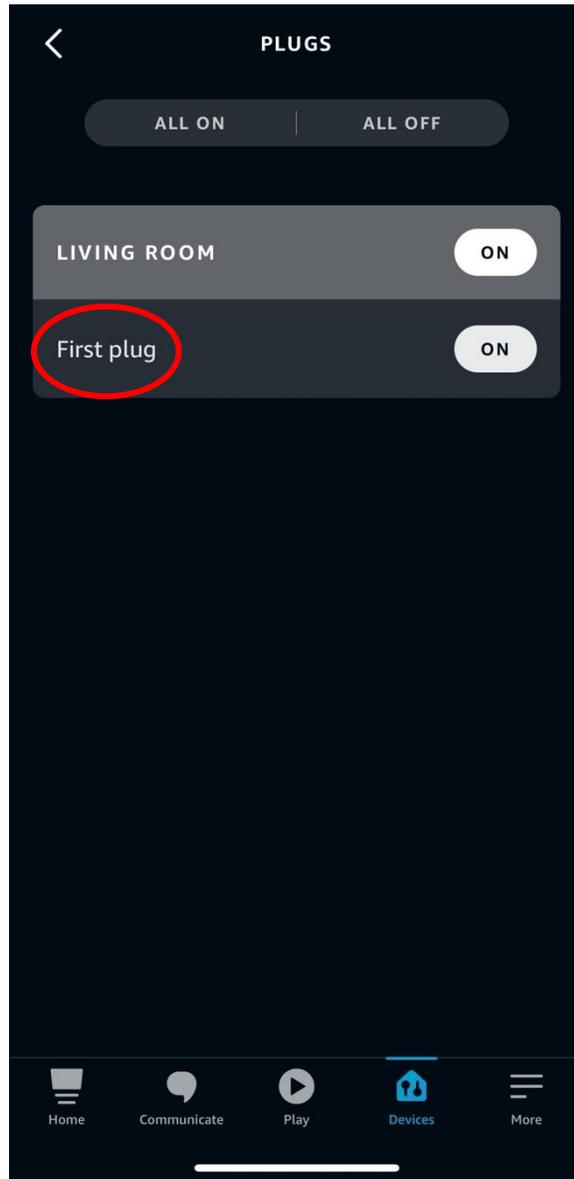
Now that your plug is connected to your Echo Show and can be used with Alexa, you can now tap "Plugs" (circled in red) to see the plug within the Alexa application. You will now name your smart plug.



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In the "PLUGS" page, you should see your new plug indicated as "New Device" under its name (circled in red). Tap to setup the name.



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Click on the "Device Name" to customize the name of your plug. We recommend naming it relevant to where it is plugged in as well as what device it is controlling. For example, "Alexa, turn on the bedroom fan."



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Congratulations! You have successfully set up your smart plug. Your smart plug is now ready to use.



Using your Smart Plugs

Now that your Smart Plugs have been successfully set up, controlling them with your Amazon Echo is a very easy process. As you recall, you named your Smart Plugs in relation to the device that they will be powering. Thus, powering the device on and off with the plug is a simple process, and one that is easier to remember.

Controlling a Device by Turning your Smart Plugs On/Off

To turn your Smart Plug-powered device on, simply say:

“Alexa, turn on _____” (insert the name of the device you assigned when setting up the smart plug)

Alexa will confirm that the action is being completed and the device will turn on.

To turn off your Smart Plug-powered device, simply say:

“Alexa, turn off _____” (insert the name of the device you assigned when setting up the smart plug)

Alexa will confirm that the action is being completed and the device will turn off.