



## Presenters

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# Case Study on Home Automation



# CREDITS

The purpose of this presentation was to provide an overview of smart home products based on experience of the presenters, hearsay from other users, and purchaser reviews on sites like Amazon, B&H, Best Buy, etc.

- \* Images/Features

Nearly all of the images and listed features of products in this presentation are from the manufactures' websites or pulled from sellers' websites such as Amazon, B & H, Best Buy, etc.

- \* Opinions

Obvious opinions are probably the presenters (Marcy Spears, Mike King, or Ryan Eisworth). Some opinions are common threads found in reviews from other buyers.



# Whose Smarter? Home or Me?

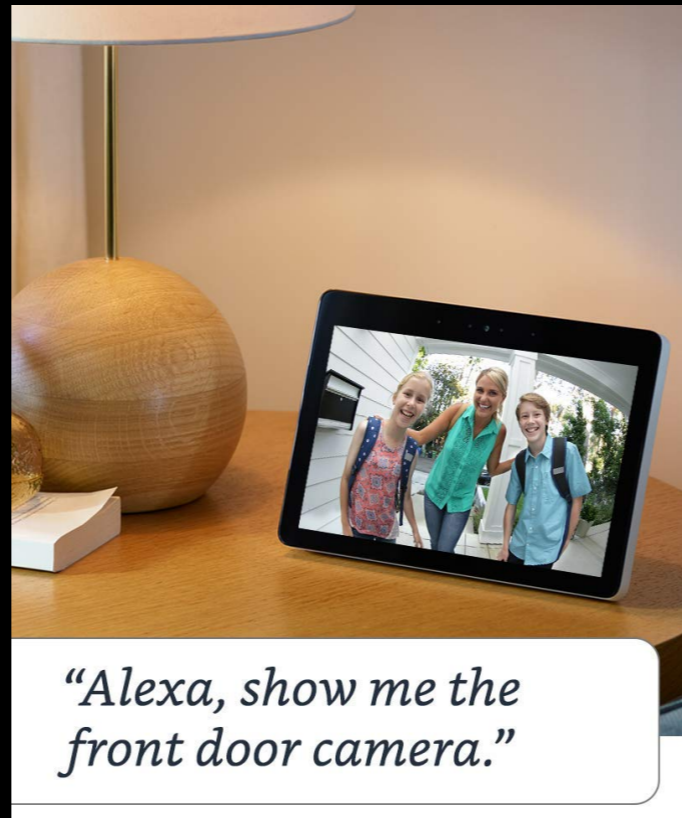
## Products Considered

- \* Wyze Cam V2
- \* Nest Indoor Security Camera
- \* August Smart Lock Pro, 3rd Generation + Hub
- \* Philips Hue Wi-Fi White Bulbs + Hub
- \* Sonos One with Alexa and Sonos Wireless Sound System
- \* Echo Dot
- \* Lutron Motion Sensor Switch
- \* Wall Outlet with 2 USB Outlets
- \* KASA TP-LINK Smart Plug
- \* WEMO Mini Smart Plug by Belkin
- \* Ring Video Doorbell
- \* **Also Discussed:**
  - \* Schlage Connect Locks
  - \* Kasa Smart Wi-Fi LED Light Bulb by TP-Link
  - \* Echo Show
  - \* Lutron Smart Switches
  - \* The Ecobee Thermostat
  - \* Ring Chime Pro





2018-10-19 17:51:22



*"Alexa, show me the front door camera."*



# Wyze Cam V2



# Wyze Cam V2: About

- \* The four founders of Wyze Labs are former Amazon employees who developed a high-quality, affordable, smart home camera.
- \* Launched November 2017, the 25-employee startup, based in Washington, is scrambling to keep up with demand for its \$19.99 Wyze Cam camera.
- \* Source: <https://www.geekwire.com/2017/amazon-vets-develop-20-wyzecam-home-camera-end-competing-former-employer/>.





# Wyze Cam V2: Cost/Ratings

- \* **Amazon**

- \* Ratings—5 stars (59% — 1,563 reviews)

- \* Cost: \$25.98

- \* **Wyze Cam**

- \* Ratings (4+ stars — 279 reviews)

- \* Cost: \$19.99 + \$5.98 shipping (\$25.98)





# Wyze Cam V2: Features

- \* Works with Alexa devices that have a screen like Echo Show.
- \* 1080p full HD or 720p SD live stream direct to your smartphone day or night with night vision (up to 30 feet away).
- \* Add a microSD card (sold separately) to enable continuous recording and schedule custom time lapse videos (SanDisk 32GB, \$9.59 from Amazon).





# Wyze Cam V2: Features

- \* Sound and motion detection (full screen or zone detection, and set sensitivity settings).
- \* Smoke alarm sound CO alarm sound detection (allows sensitivity settings).
- \* Alert schedule all day or defined hours.
- \* Includes a magnetic base and adhesive plate to mount your Wyze Cam with 6-foot power cable.





# Wyze Cam V2: Pros/Cons

## \* **Pros:**

- \* Cheap and easy to install.
- \* Works with Alexa devices with a screen.
- \* App is easy to use on the iPhone.
- \* Night Vision can be set to auto; loads faster.
- \* You can set up alerts, notifications, and tasks.





# Wyze Cam V2: Pros/Cons

## \* **Pros:**

- \* 1080p full HD live stream; nice quality image on phone or iPad for inside your house.
- \* Two-way audio allows you to listen and to talk to someone in the room.





# Wyze Cam V2: Pros/Cons

## \* Cons:

- \* Does not work with Apple Home.
- \* Must update each camera individually, instead of as a group—takes time.
- \* Either SD/HD can be slow and choppy depending on the strength of your WIFI or phone connection.
- \* Alerts may drive you crazy; set sensitivities lower, use zones to narrow down location of motion; sunlight can trigger an alert.
- \* Cannot turn cameras on/off using your phone's location (NEST does this).





# Wyze Cam V2: Pros/Cons

## \* **Cons:**

- \* Only suitable for mounting inside—but third-party mounting devices for inside and outside are also available.
- \* The image quality is not good enough to monitor a bird feeder (distance/movement are both factors); distance is limited to 30 feet.
- \* If you are going to mount these cameras high, you will need USB cords longer than 6', which are available from Amazon (16.4' or 26').



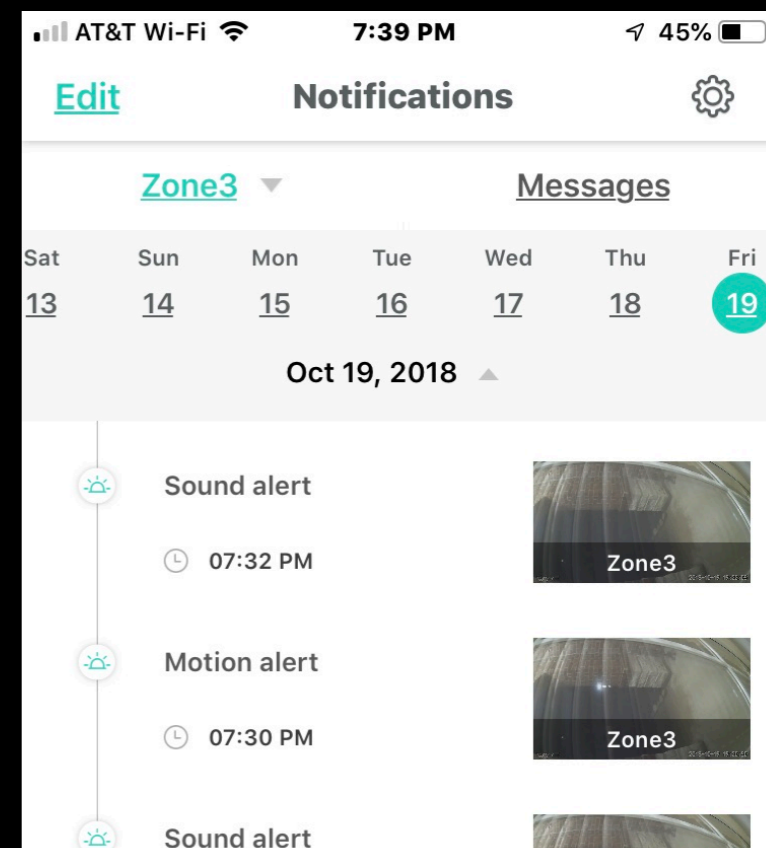
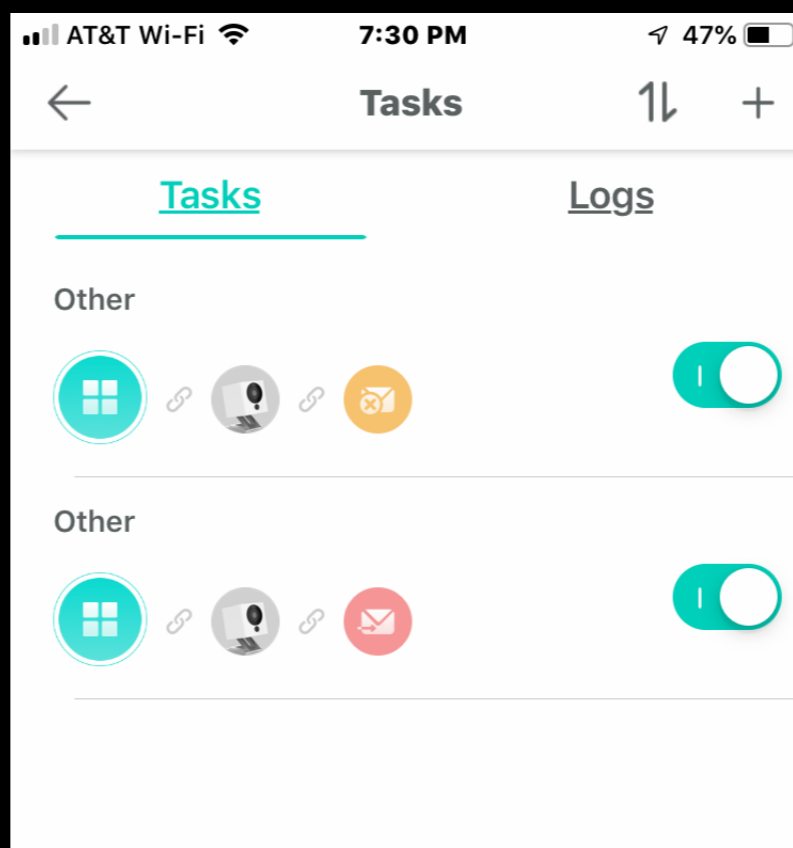
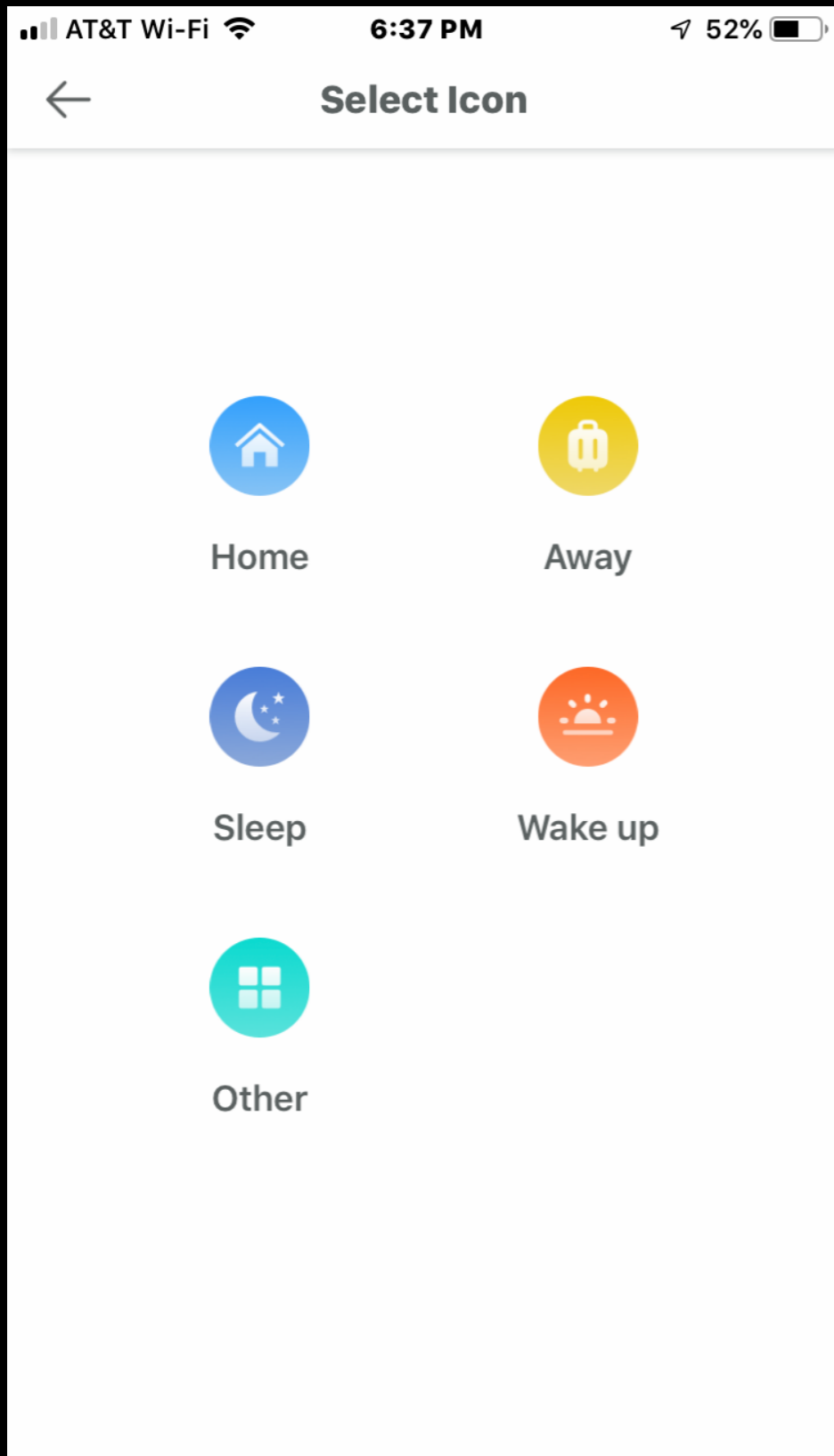


# Wyze Cam V2: Use

- \* Use (installed 4 of these):
  - \* Front Porch (placed in window), Entry way, Library, and Bedroom.
- \* My rating
  - \* For the price, I would give this a 4 star rating.
  - \* I am willing to put up with the CONS, because of the price vs. buying multiple Nest Security Camera.










# Wyze Cam V2 Screen Shots




Family Room (Nest Camera)  
Nest Cam Indoor


**Automatically turn the camera on and off?**  
 This camera will use phone location to turn on when you're gone and back off when you return home.  
[Learn more >](#)


HOW IT RESPONDS

	<u>Home</u>	Turns off
	<u>Away</u>	Turns on

Spaces


 Spaces is a room by room view of your Nest products. It's especially useful for seeing all your cameras in one place as soon as you open the app.

Family Room


[Family Room \(Nest Camera\)](#) >



# NEST Indoor Security Camera



# NEST Indoor Security Camera: About

- \* Nest offers two outdoor and two indoor cameras.
- \* They also offer two thermostats, a video doorbell, an alarm system, a Yale door lock, and a smoke and CO alarm.
- \* Their product line has expanded a lot since I purchased my Nest camera.





# NEST Indoor Security Camera

## Cost/Ratings

- \* Amazon

- \* Ratings—4 stars (68% — 6,890 reviews)

- \* Cost: \$171.90

- \* Nest

- \* Ratings (4.8 stars — 616 reviews)

- \* Cost: \$199.00 + free shipping





# NEST Indoor Security Camera: Features

- \* The Nest security camera can use your smart light bulbs to get your attention in an emergency or turn off/on when you leave/enter a room (Phillips Hue/LIFX).
- \* Works with Alexa devices (doubt that mine does); haven't tried yet
- \* 24/7 live streaming anytime
- \* 24/7 continuous recording and cloud storage with "Nest Aware" subscription (cost ranges from \$5 to \$30 for a month depending upon how long you want to keep the video history for one camera).
- \* 1080p video with 8x digital zoom.





# NEST Indoor Security Camera: Features

- \* Shifts to night vision automatically.
- \* Has a built in speaker and microphone.
- \* You can use the wall plate to mount the camera to a wall or stick it to something magnetic (like the top of your refrigerator).
- \* This camera is powered with a USB cable.
- \* It will send you an alert when the camera detects sound and/or activity.
- \* Can detect the difference between person alerts and activity alerts.





# NEST Indoor Security Camera: Pros/Cons

## \* Pros:

- \* Medium easy to install, more work than the Wyze camera (unless you mess up and have to do it again because it requires you to scan the QR code on the bottom of the camera with your phone).
- \* Easy to mount.
- \* App is easy to use on the iPhone once installed.
- \* Can set camera to go off when your cell phone is at home and to activate when you leave.





# NEST Indoor Security Camera: Pros/Cons

## \* Cons:

- \* Does not work with Apple HomeKit.
- \* The Nest Security Camera does not work with Alexa or Google Assistant, but the newer Nest Cam IQ indoor does work with Google.
- \* Alerts may drive you crazy; set audio sensitivity lower, use zones to narrow down location of motion; sunlight can trigger an alerts.
- \* I made one attempt to connect the Nest Camera with my Hue lights (<https://nest.meethue.com>), They could see each other, but nothing happened (maybe user error).





# NEST Indoor Security Camera: Use

- \* Installed one Nest Security Camera:
  - \* The camera is installed at the back of the house.
  - \* It covers an area from the family room all the way to the front door.
- \* My rating
  - \* I would give this a 4 star rating.
  - \* I like this camera, but it in the beginning it lost its settings periodically; hasn't happened in a long time.





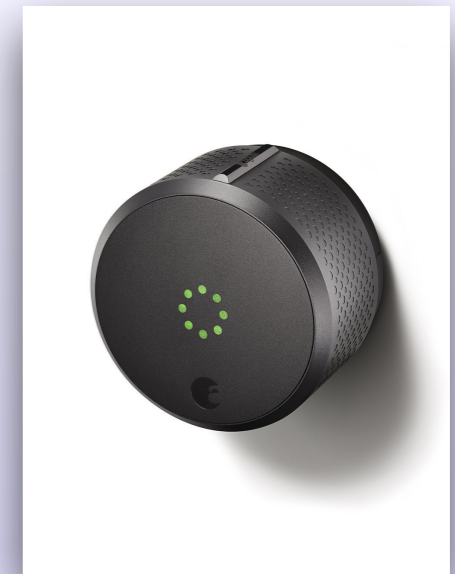


# August Smart Lock Pro Connect



# August Smart Lock Pro, 3rd Generation: About

- \* Lock and unlock your door from anywhere, grant secure access to friends and family.
- \* Track who is coming and going, all from the August app.
- \* Automatically unlocks when you arrive and locks when you leave.
- \* August Smart Lock Pro works with all three voice assistants - Siri, Amazon Alexa, and the Google Assistant.
- \* Works with most standard single cylinder deadbolts.





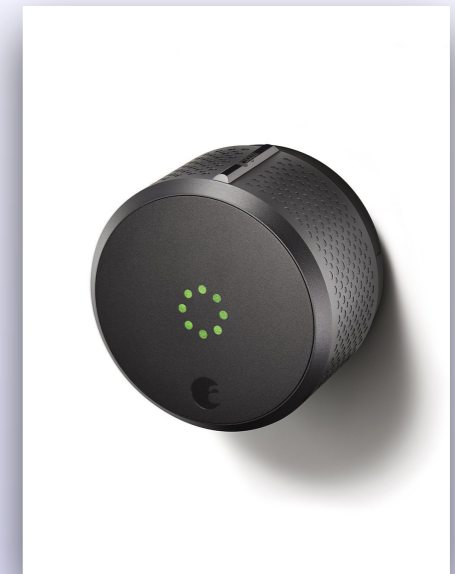
# August Smart Lock Pro, 3rd Generation: Cost/Ratings

- \* **Amazon**

- \* Ratings—4 stars (67% — 872 reviews)
- \* Cost: \$249.93 with the Connect Wi-Fi bridge (hub)

- \* **August**

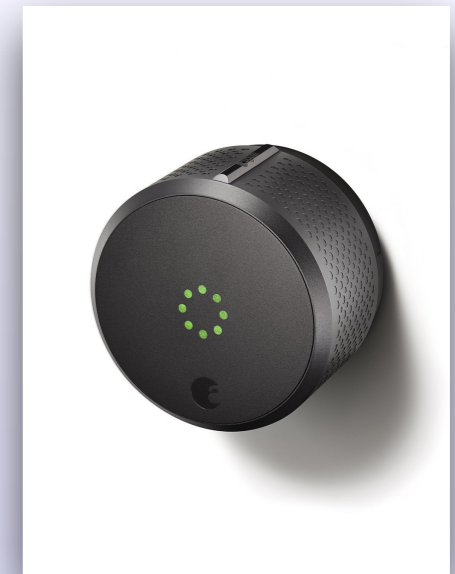
- \* Cost: \$229.00 with the Connect Wi-Fi bridge (hub)
- \* **ConsumerReports.Org**, best rating of all smart locks (81%)





# August Smart Lock Pro, 3rd Generation: Features

- \* Comes in black or white.
- \* Door sense technology: knows when your door is both closed and locked.
- \* Auto-lock: locks your door automatically when you leave; you can set the time interval.
- \* Voice control: works with Homekit, Alexa and Google assistant.
- \* Control your door from anywhere with the Connect Wi-Fi bridge.
- \* Uses bank grade security (AES 128 bit and TLS encryption).

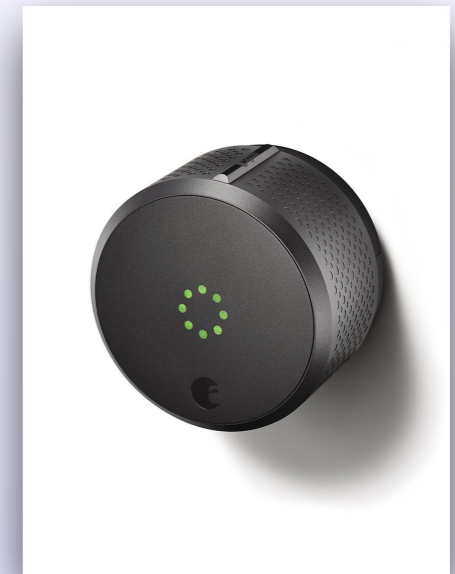




# August Smart Lock Pro, 3rd Generation: Pros/Cons

## \* **Pros:**

- \* Works with all three voice assistants - Siri, Amazon Alexa, Google Assistant, Airbnb, HomeAway, NEST, zWave, Xfinity, and more.
- \* Easy to install (even for me).
- \* Keeps track of who comes in and out and can send you notifications (for me—its caregivers).
- \* So far, works the way it says it does.

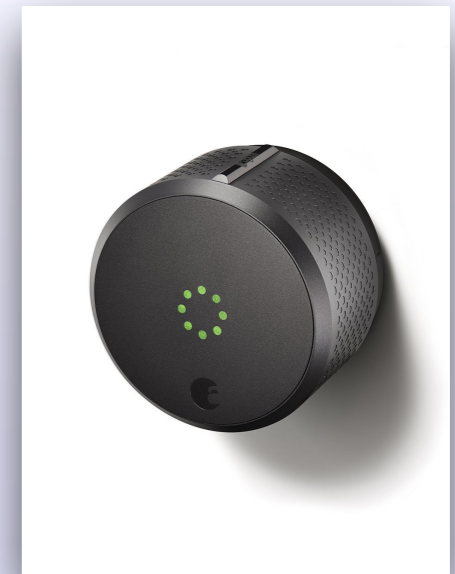




# August Smart Lock Pro, 3rd Generation: Pros/Cons

## \* **Cons:**

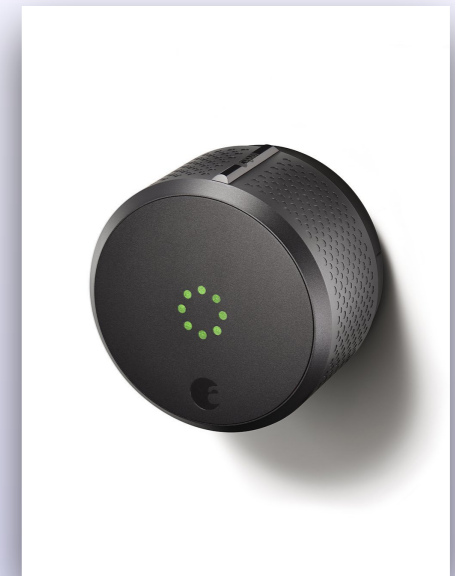
- \* If you have a lot of traffic you may have to change the batteries more often.
- \* It's kind of a big clunky thing on the inside of your door.
- \* Almost always confuses visitors when they try to leave (cannot figure out how to open door).
- \* You can't treat entry keypad like a video game; you must go slower.



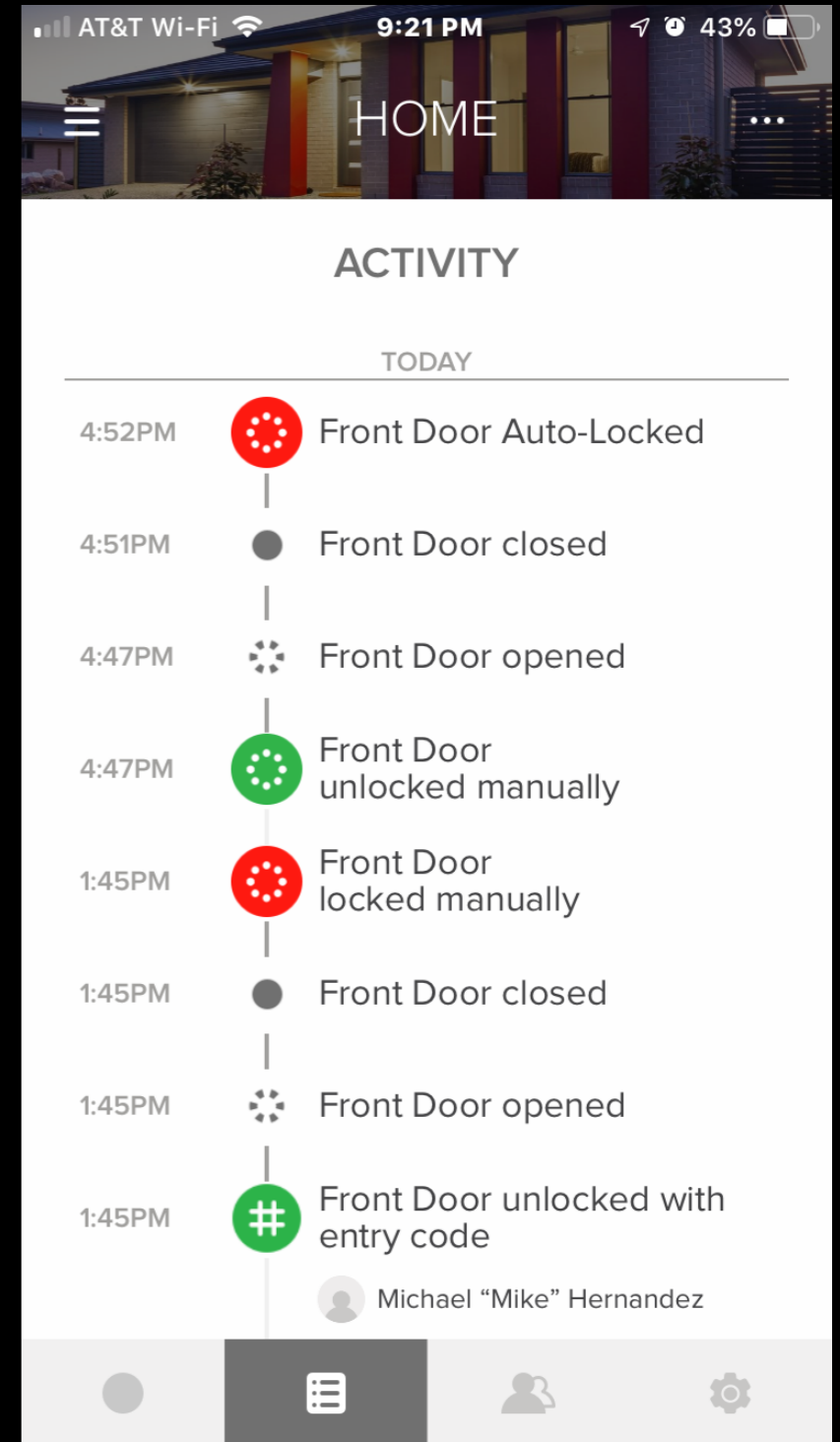
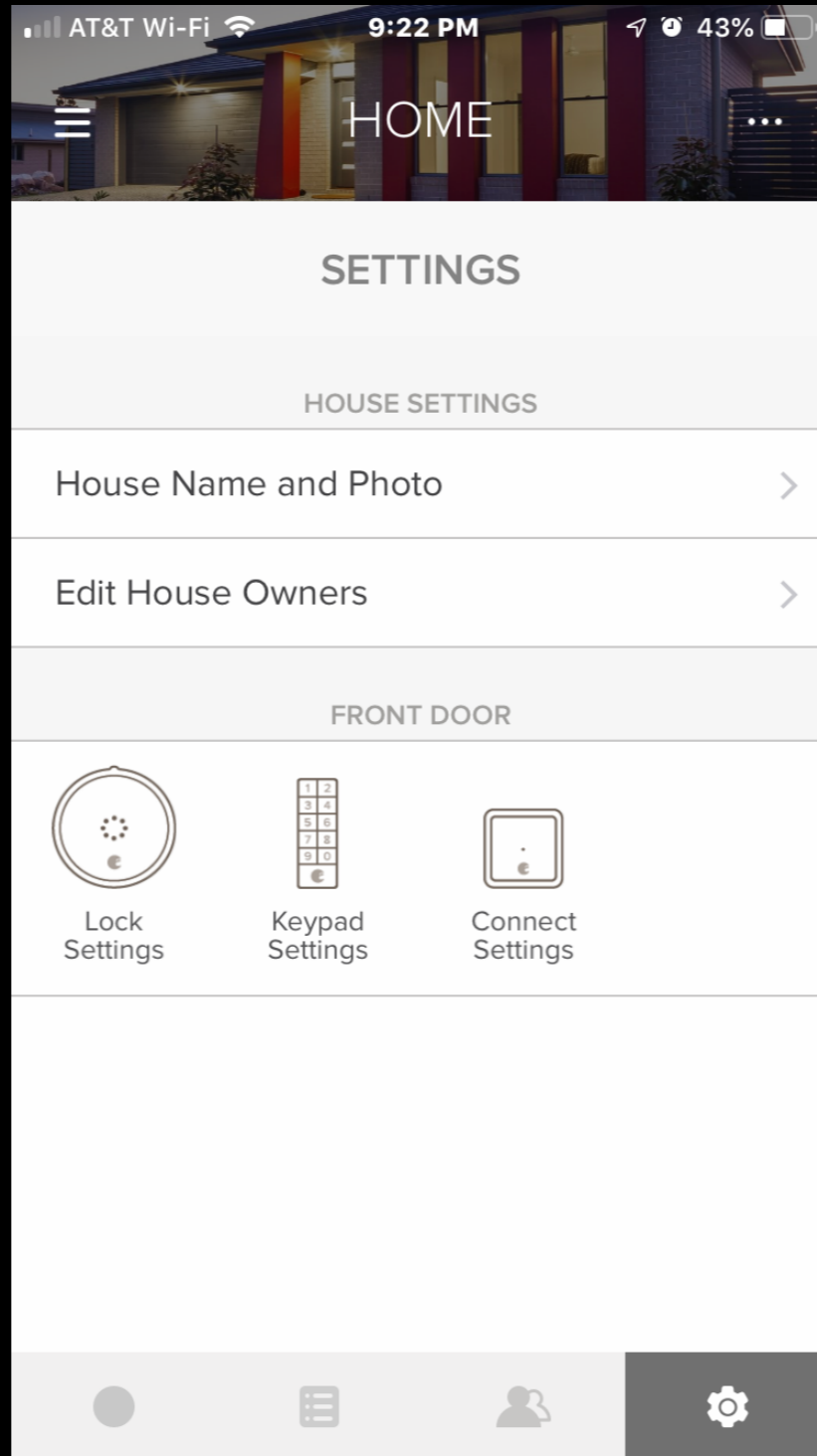
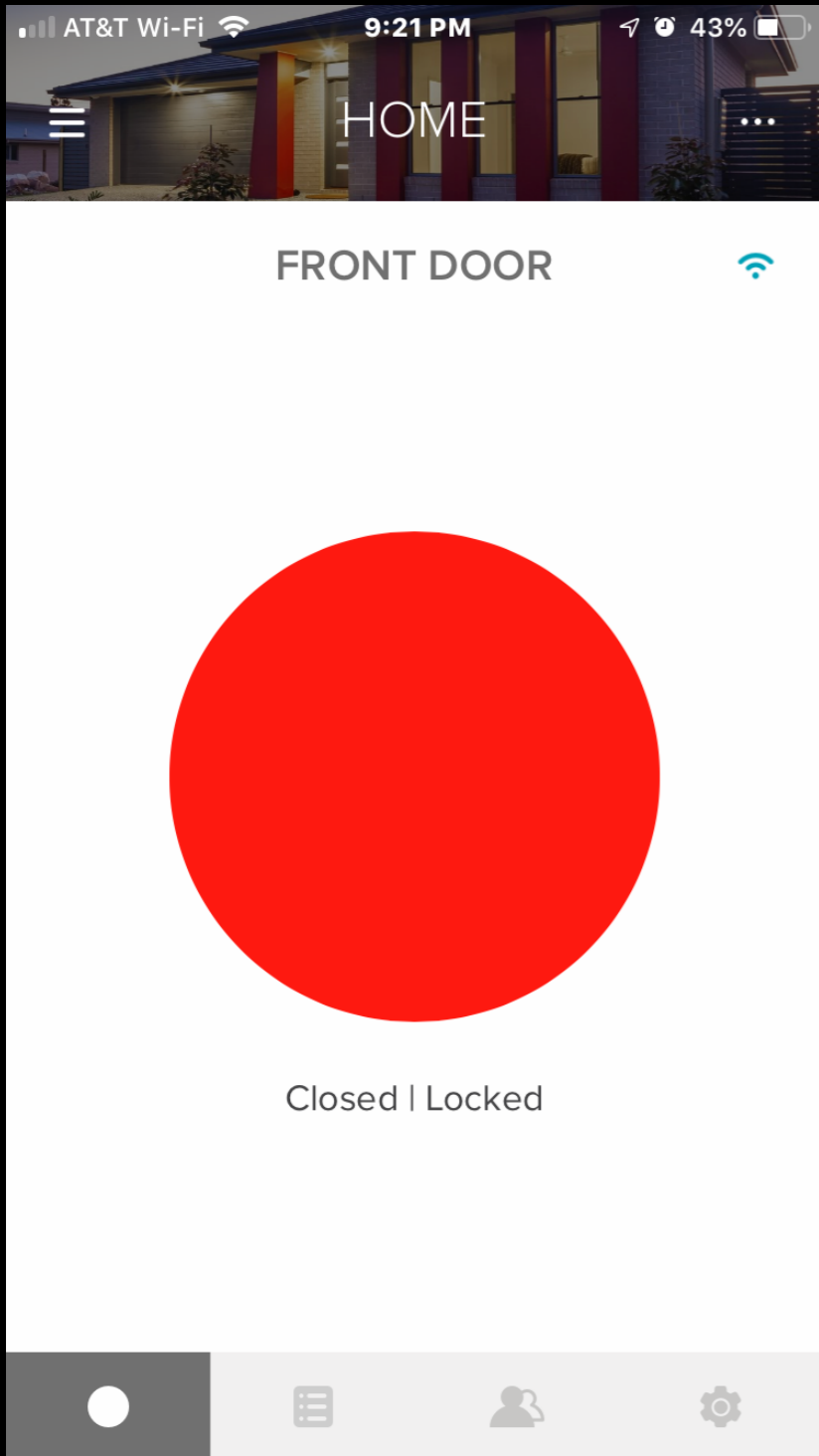


# August Smart Lock Pro, 3rd Generation: Use

- \* Installed only on the front door
  - \* Front Porch (placed in window), Entry way, Library, and Bedroom.
- \* My rating
  - \* I would give this a 4 star rating; the CONS prevent a 5 star rating, yet it hasn't given me any trouble since installing it.
  - \* I have not tried to integrate with Alexa or Homekit yet, nor have I tested it with NEST.







# August Smart Lock PRO Screen Shots





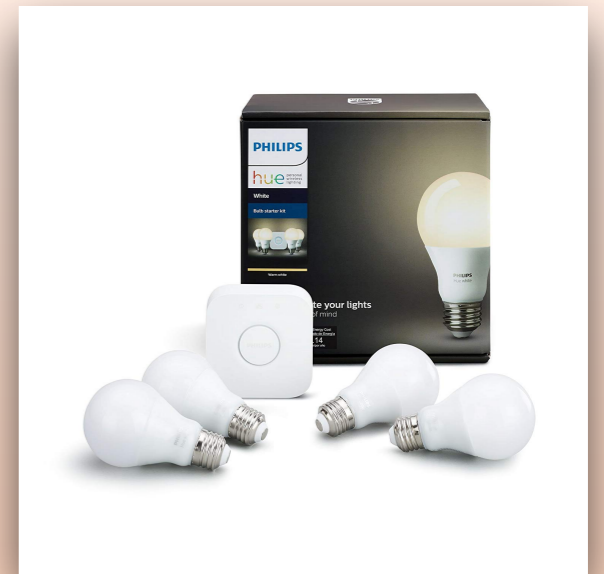
# Philips Hue White Bulbs



# Philips Hue White Bulbs: About

<https://www2.meethue.com/en-us>

- \* The popularity of smart bulbs is somewhat driven by the security features that allow light behavior to simulate occupancy even when you are not home.
- \* They also allow you to control the lights by working with other applications, such as Amazon Alexa, Apple Homekit, Google Assistant, Microsoft Cortana, NEST, Xfinity, Logitech Harmony remote control, Samsung SmartThings...and more.
- \* Other apps can “fancy up” your light shows if you are into that.

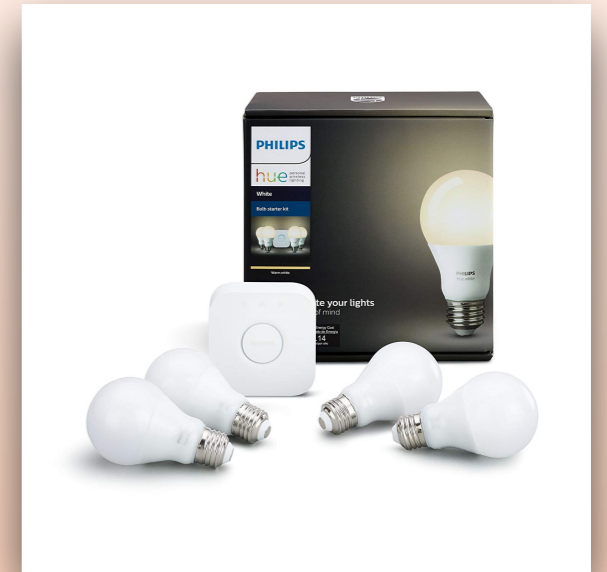




# Philips Hue White Bulbs: Cost/Ratings

## \* Amazon

- \* Ratings—4 stars (67% —597 reviews)
- \* Cost: \$91.50 starter kit with 4 A19 white bulbs and 1 hub (Alexa, Apple, and Google Assistant compatible)



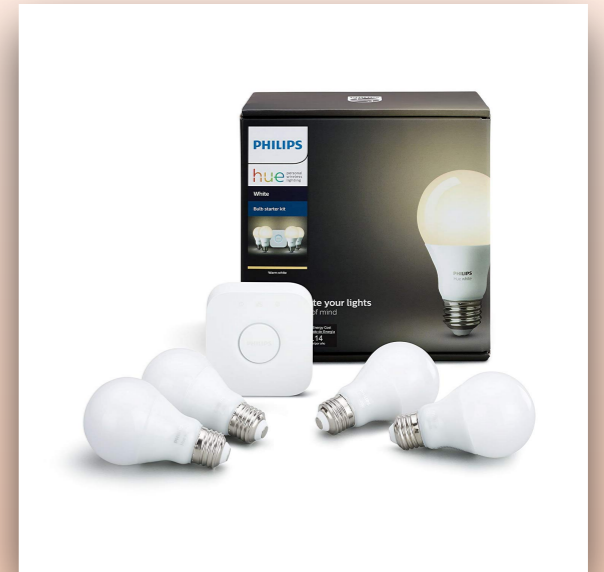
## \* Philips

- \* Ratings (not available)
- \* Cost: \$99.99 starter kit (same as above), but out of stock



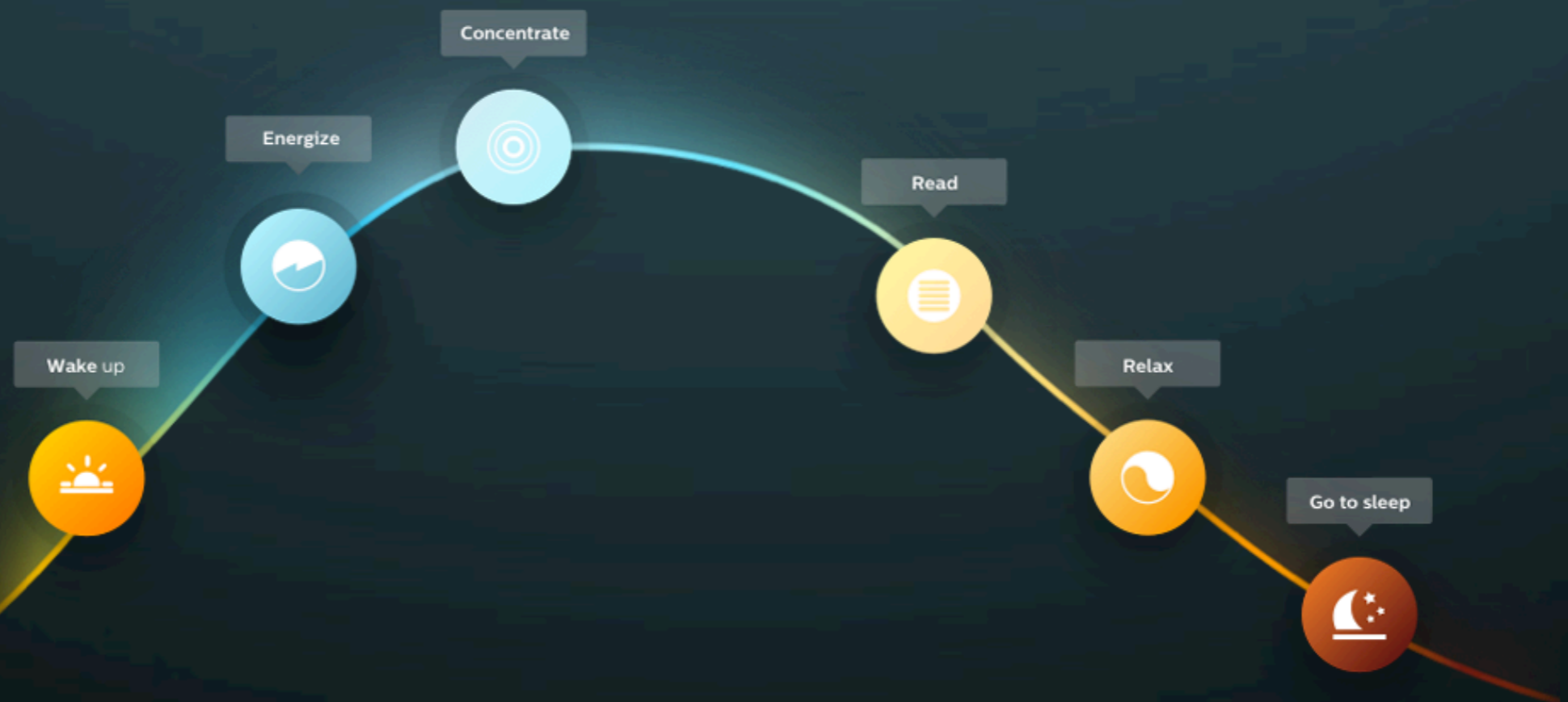
# Philips Hue White Bulbs: Features

- \* Hue bulbs allow dimming or different colors of lighting (mood) without having to change your lighting hardware.
- \* Philips Hue lights use a Zigbee bridge, or hub which will allow your phone to communicate with the bulbs using an app.
- \* You can set up rooms, scenes, create moods, control lights with your voice, use lights to wake you up or make you sleepy.
- \* Who knew light bulbs could be this much fun?





# Philips Hue White Bulbs: Change your lighting:



**Daily activities**

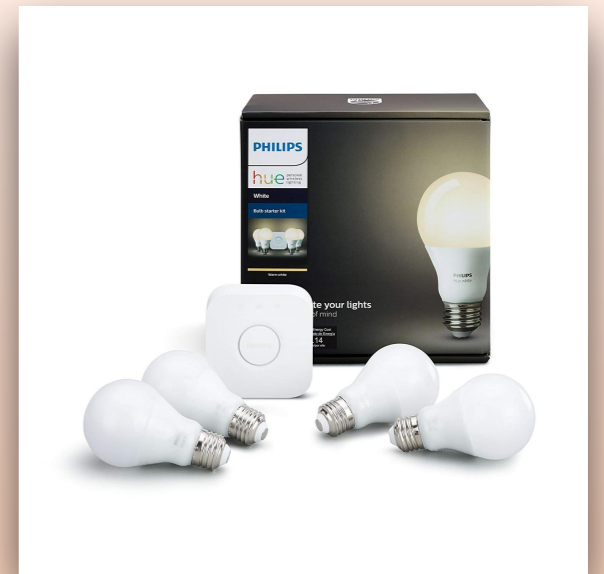
**Light that follows you through your day**



# Philips Hue White Bulbs: Pros/Cons

## \* Pros:

- \* It is an effective way to simulate presence when you are absent.
- \* It's a blast to walk around telling Alexa (or whomever) to turn lights on and off.
- \* It's nice not to have to get out of bed to turn the lights off.
- \* It's nice not to have to run around at night turning everything off.
- \* I really like the general convenience and they were easy to set up.

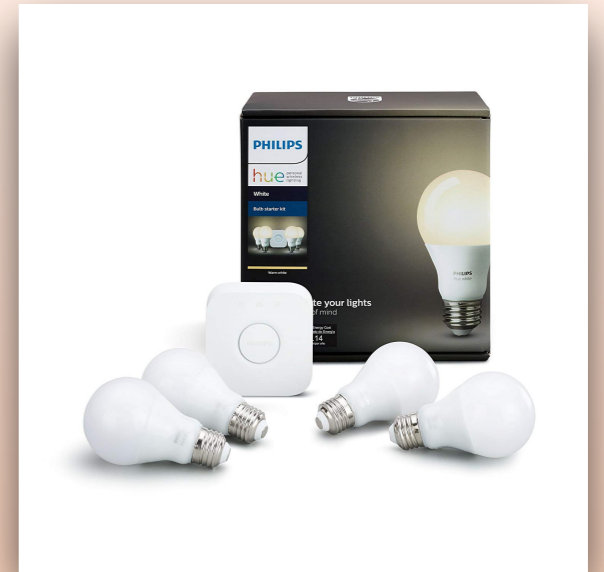




# Philips Hue White Bulbs: Pros/Cons

## \* Cons:

- \* If you are always using your app to fiddle with your smart bulbs, it can turn into a big time-suck.
- \* It is more expensive (the bulbs and the gear) than regular LED bulbs.
- \* Speciality bulbs may not be available for any of the “smart bulb” systems (yet).
- \* These bulbs do not seem as bright to me as the standard LED bulbs—just slightly less bright.

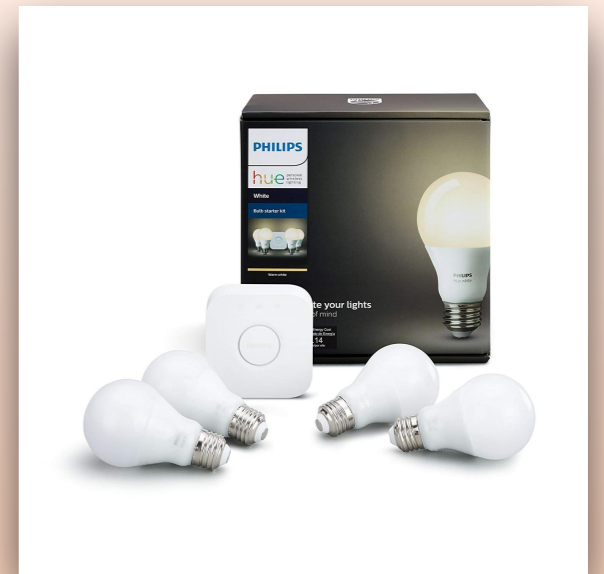




# Philips Hue White Bulbs: Pros/Cons

## \* Cons:

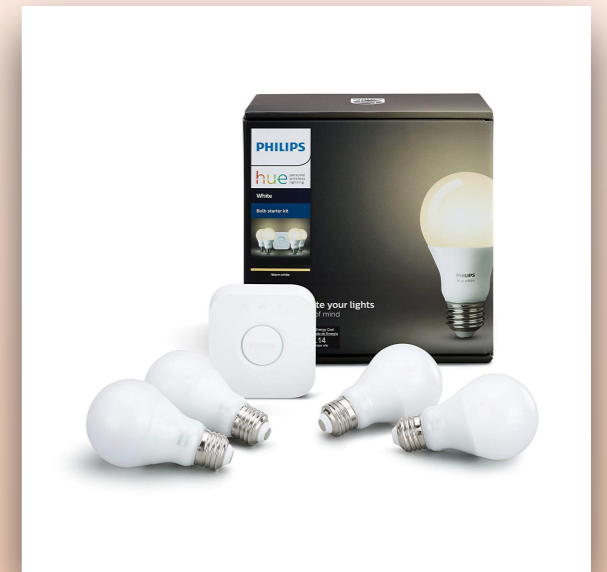
- \* Smart switches may be a better approach (the switches aren't cheap, but you can use regular bulbs).
- \* A smart plug may be a cheaper approach for some lighting issues.
- \* I tried settings for lighting during the day—especially to get me to go to bed earlier (it didn't work—I just told Alexa to turn them back on at 100%).
- \* It is not a cheap hobby.



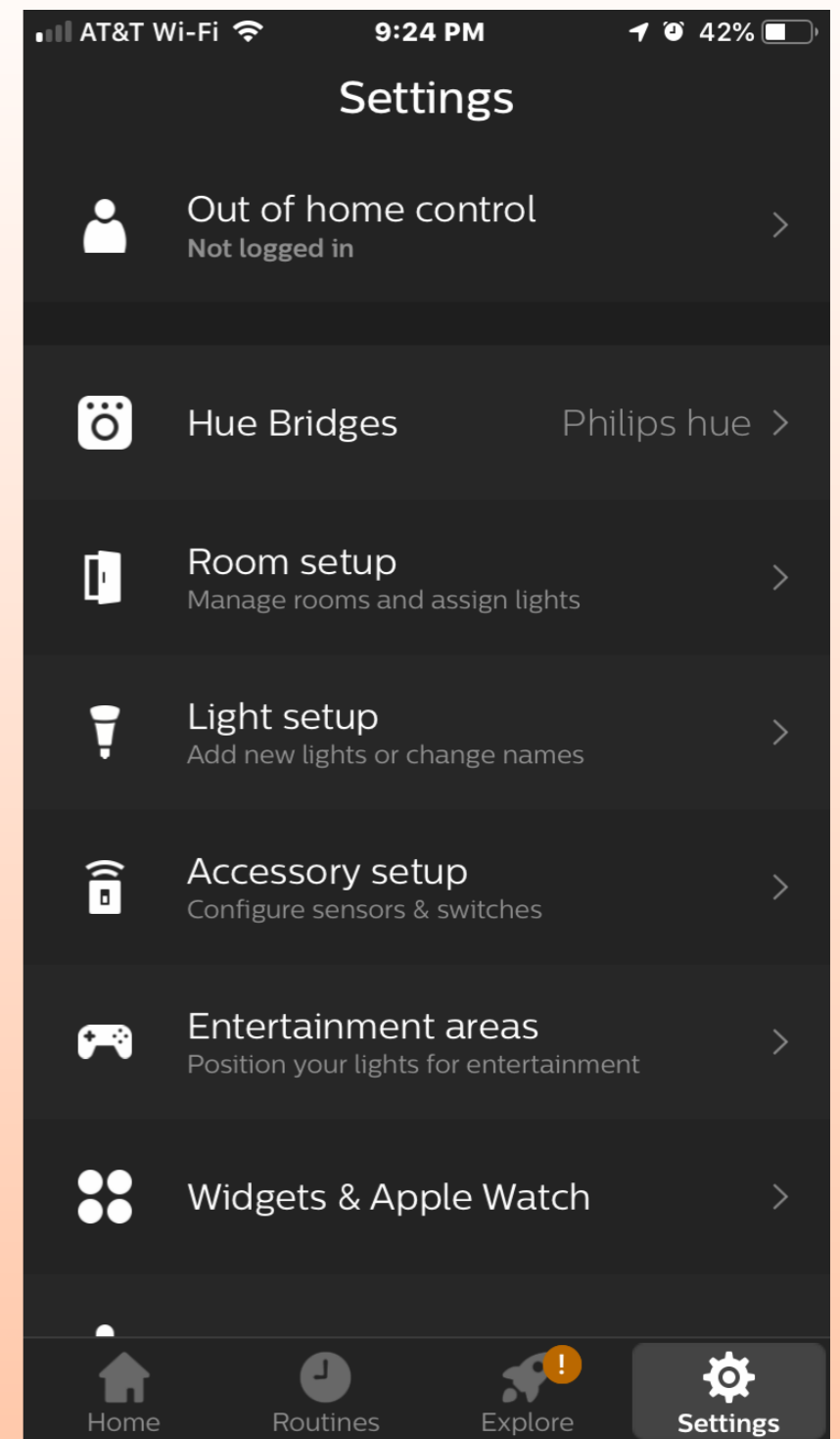
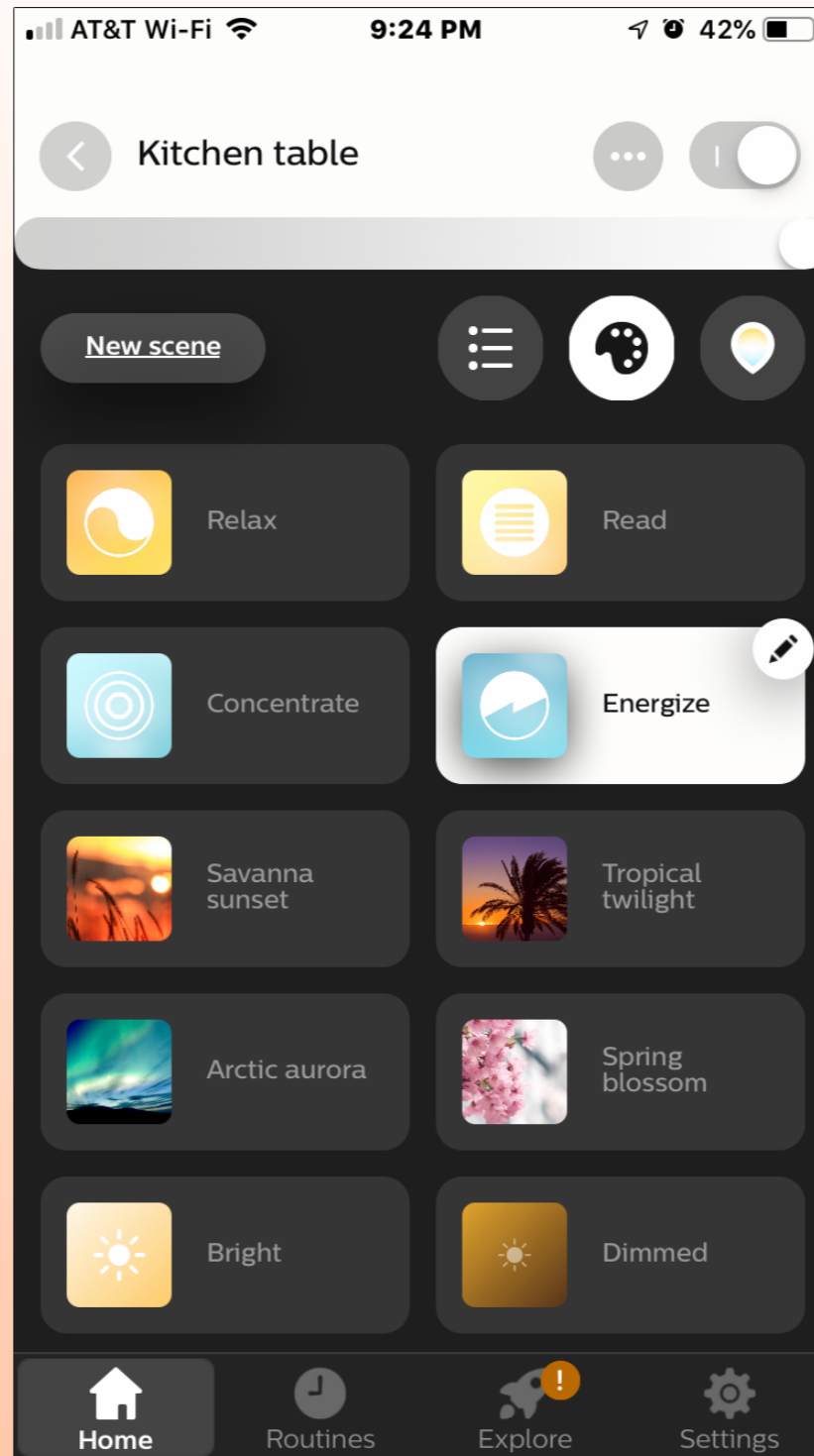
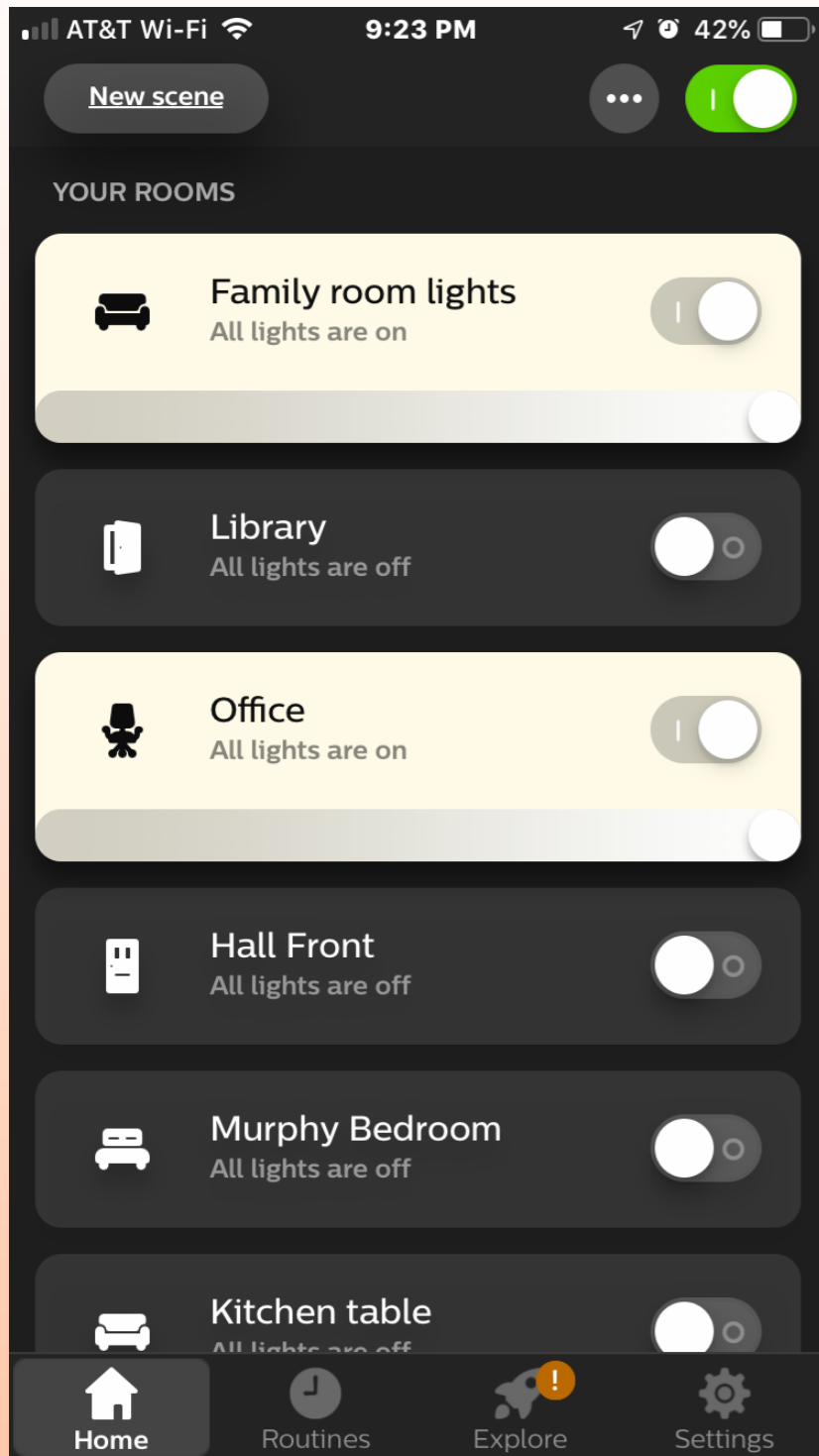


# Philips Hue White Bulbs: Use

- \* I installed 17 regular bulbs and 1 flood light. They are primarily installed in the public part of the house and one bedroom as well as the front porch.
- \* I am using them more like they are on a timer. They come on in the morning just as I am waking up and go off about 10:00 p.m.
- \* I have used the mood lighting for the fun of it, to convince myself to go to bed earlier—it is not working.
- \* I initially set these up with the HUE app and integrated that with Alexa. I haven't had a chance to try it with Homekit yet.
- \* I would give them a rating of 4 + 1/2 (for the fun), and maybe a 3 for the cost.







# Philips Hue White Bulbs Screen Shots



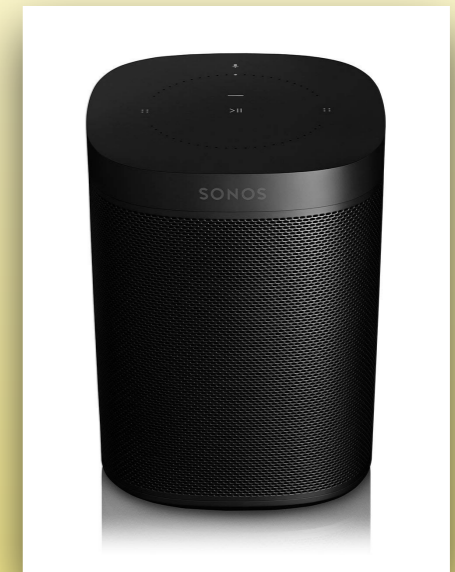


**Sonos One with Alexa**



# Sonos One with Alexa: About

- \* Wireless Sonos Speakers are terrific. The Sonos One is nicer than the older Sonos speakers, much better sound.
- \* In this speaker, the Amazon Dot is included in the speaker.
- \* You do not need the Amazon Dot to use music services such as Spotify, AmazonMusic, Apple Music, etc.
- \* There are lots of audio options for the Sonos system. What do you have in your wallet?





# Sonos One with Alexa: Cost/Ratings

- \* **Amazon**

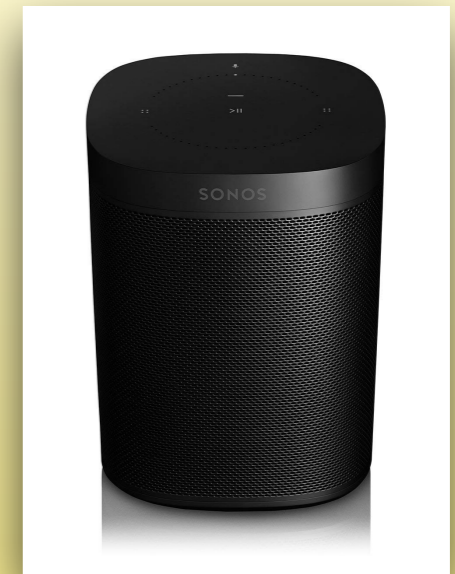
- \* Ratings—5 stars (48% — 927 reviews)

- \* Cost: \$199.00

- \* **Best Buy**

- \* Ratings 4.5 stars (74% — 1,512 reviews)

- \* Cost: \$199.00





# Sonos Speakers: Features

- \* With multiple Sonos speakers you can play the same or different music in multiple rooms in the house.
- \* Older speakers (like mine) require a Sonos Bridge to connect wirelessly together.
- \* Speakers may be paired with each other for even better sound.
- \* If you have a Sonos Amp you can connect non-Sonos speakers and other audio equipment with your Sonos speakers.
- \* Even without Alexa, you can use music services such as Spotify, Apple Music, Amazon Music, etc.

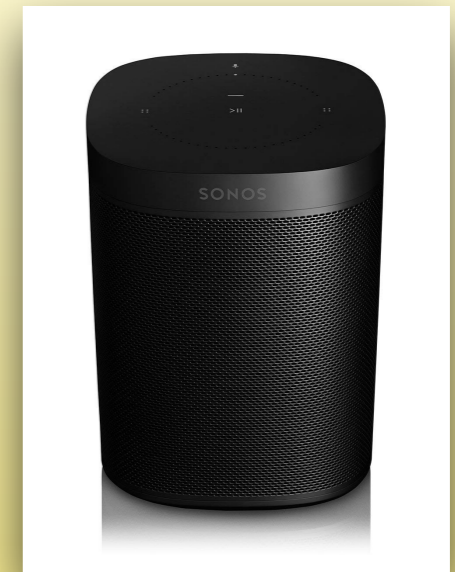




# Sonos One with Alexa: Pros/Cons

- \* **Pros:**

- \* There are no downsides to the speaker itself.
- \* The speaker itself is great!

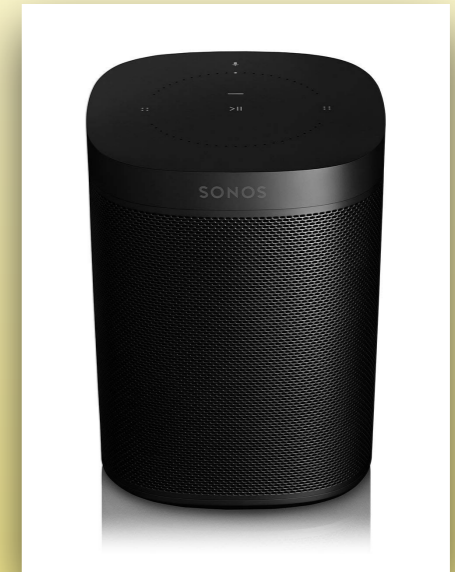




# Sonos One with Alexa: Pros/Cons

## \* **Cons:**

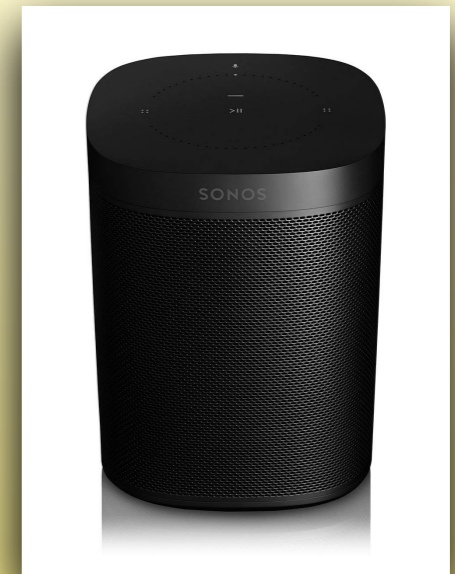
- \* The Alexa part seems to work fine, but if you are using the speaker for music, the volume for Alexa is not loud enough to be heard well.
- \* That I don't have enough money to replace my older Sonos speakers.



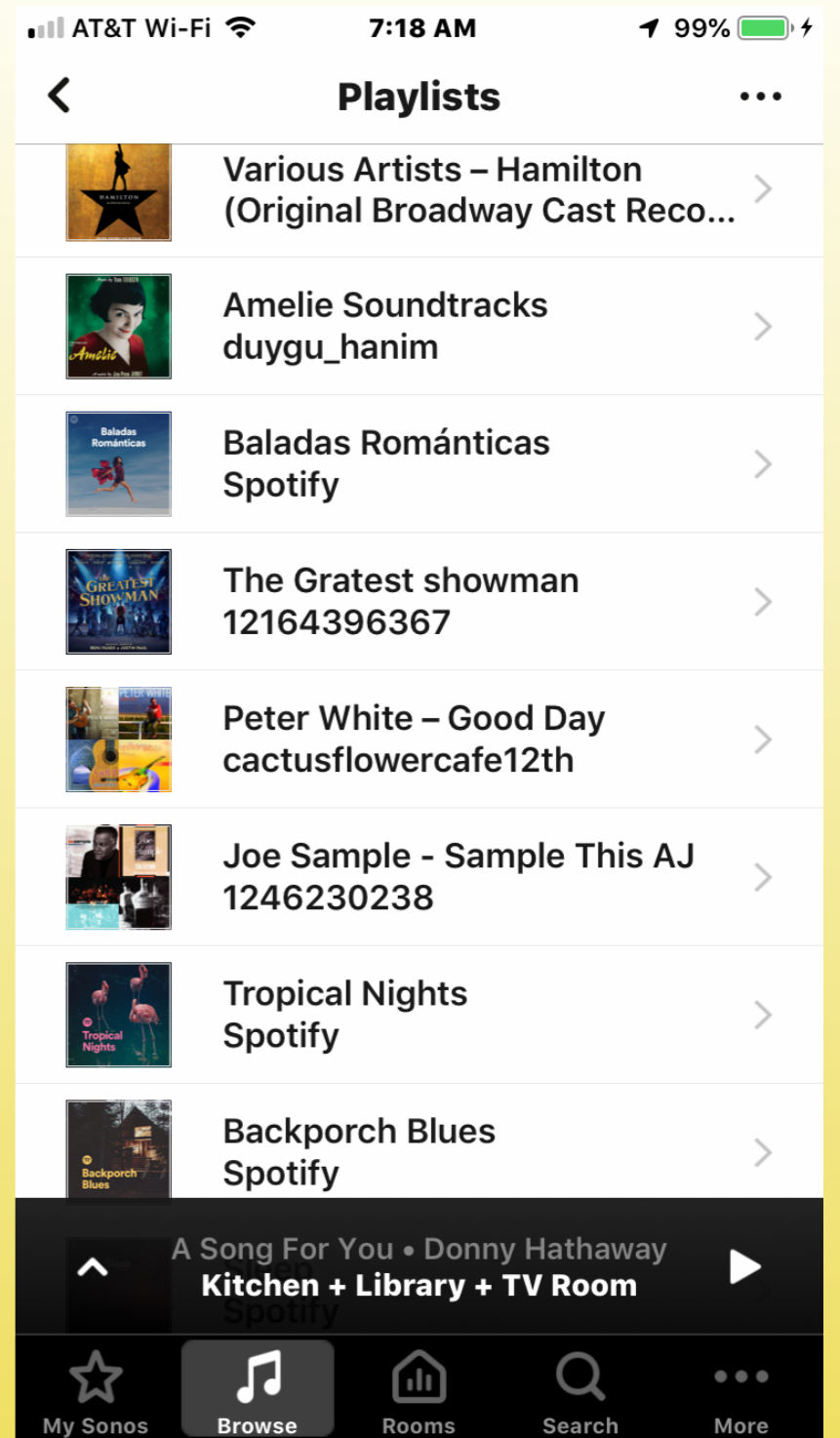
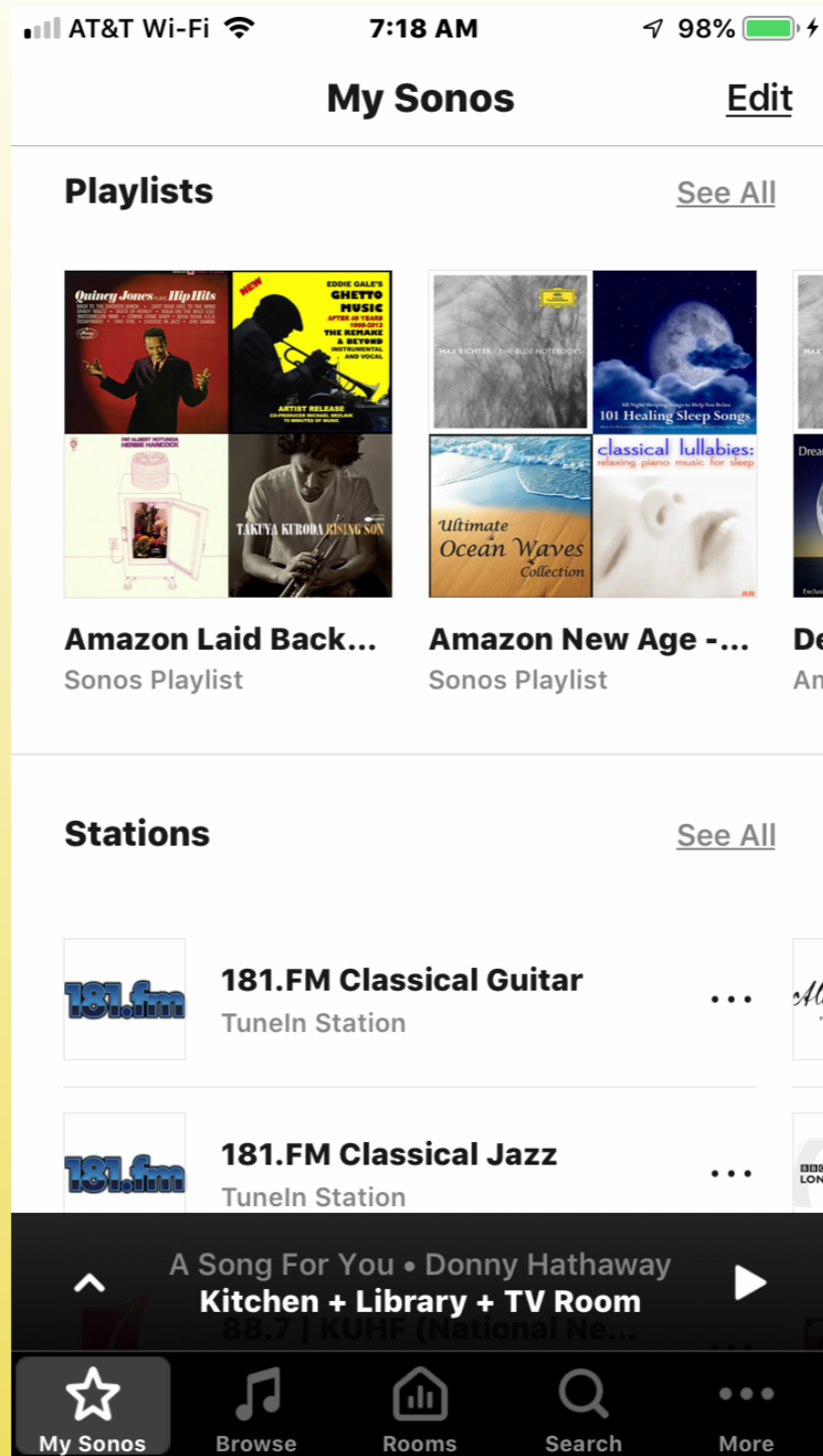
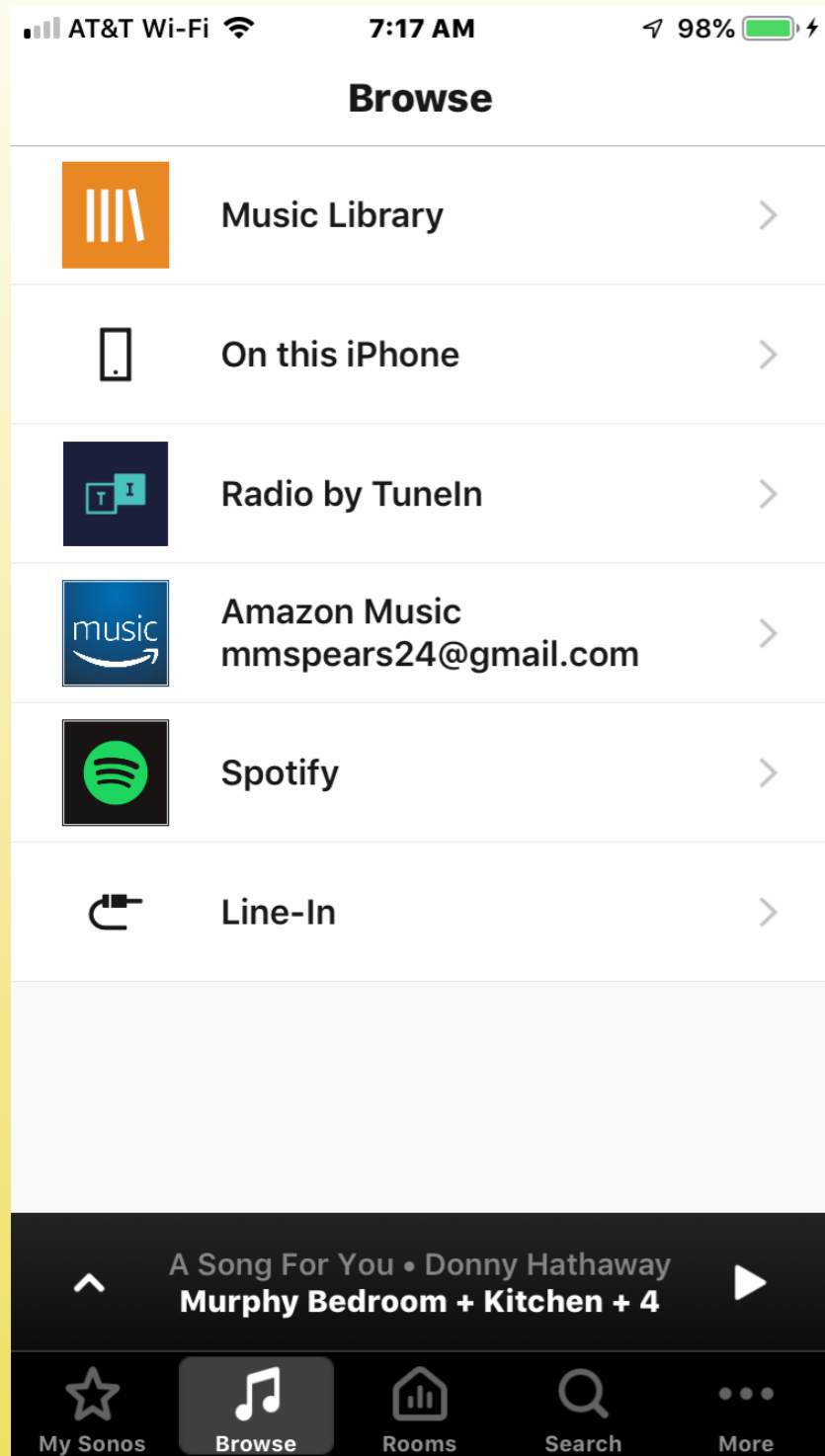


# Sonos One with Alexa: Use

- \* We have several of the old Sonos speakers and have combined them with our regular stereo speakers, and other audio equipment using the Sonos Amp.
- \* We hardly ever play music using the CD player or music stored on my computer previously ripped from our original CDs. Spotify seems to have most of what we were playing anyway.
- \* Our use of the Alexa feature in the Sonos One has more to do getting used to Alexa than anything else.
- \* We use the Sonos app to play music, sometimes more than Alexa. Alexa doesn't always understand us.







**Sonos One with Alexa Screen Shots**





**Echo Dot (2nd Generation)**



# Echo Dot (2nd Generation) - Smart speaker with Alexa: About

- \* Voice controlled speaker that can control smart home devices (lights, locks, thermostats, etc.), make calls, answer questions, reminders, set timers, alarms...
- \* Play music from Amazon Music, Spotify, iHeartRadio, and more.
- \* There are currently 50,000 skills that you can take advantage. I'm so overwhelmed by the list, I've only tried a few.





# Amazon Dot: Cost/Ratings

- \* **Amazon**

- \* Ratings—4.3 stars (66% — 118,698 reviews)

- \* Cost: \$39.99

- \* **Best Buy**

- \* Ratings (4.7 stars — 25,663 reviews)

- \* Cost: \$39.99





# Amazon Dot: Features

- \* Far-field voice recognition
- \* Add Alexa to an existing speaker
- \* Voice control your music
- \* Shop online
- \* Control your smart-home devices
- \* If you give Alexa access to your address book you can send messages and/or call family without picking up your phone





# Amazon Dot: Pros/Cons

## \* Pros:

- \* You can voice-control your smart home devices.
- \* Make Alexa help you with cooking.
- \* Best feature for me is telling it to play music for me.
- \* Leave reminders for Frank.





# Amazon Dot: Pros/Cons

## \* **Cons:**

- \* Seems like you are throwing out any privacy that you ever thought you might have had.
- \* There are so many things that you can do with this that it makes it hard to navigate, and time consuming.

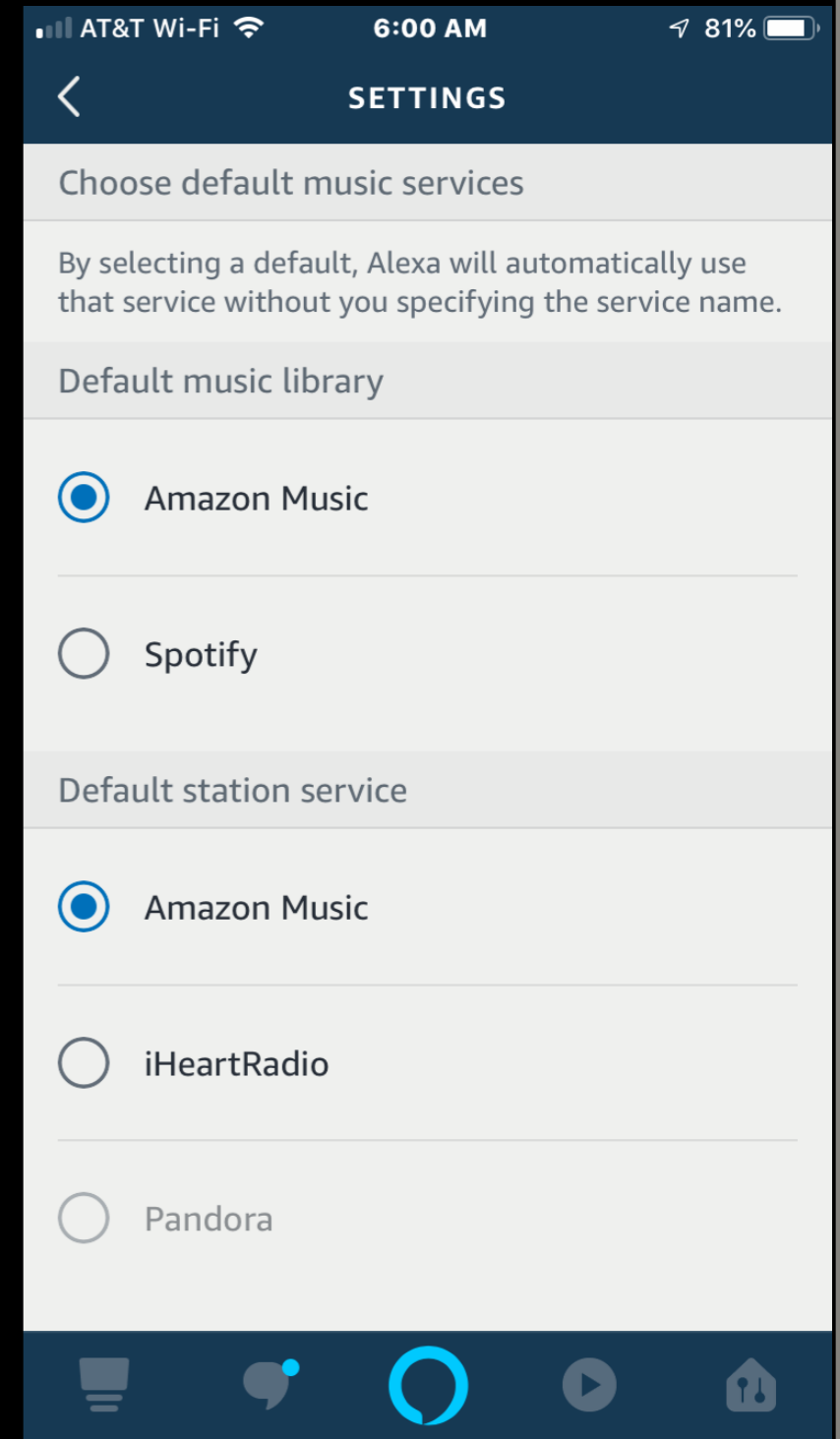
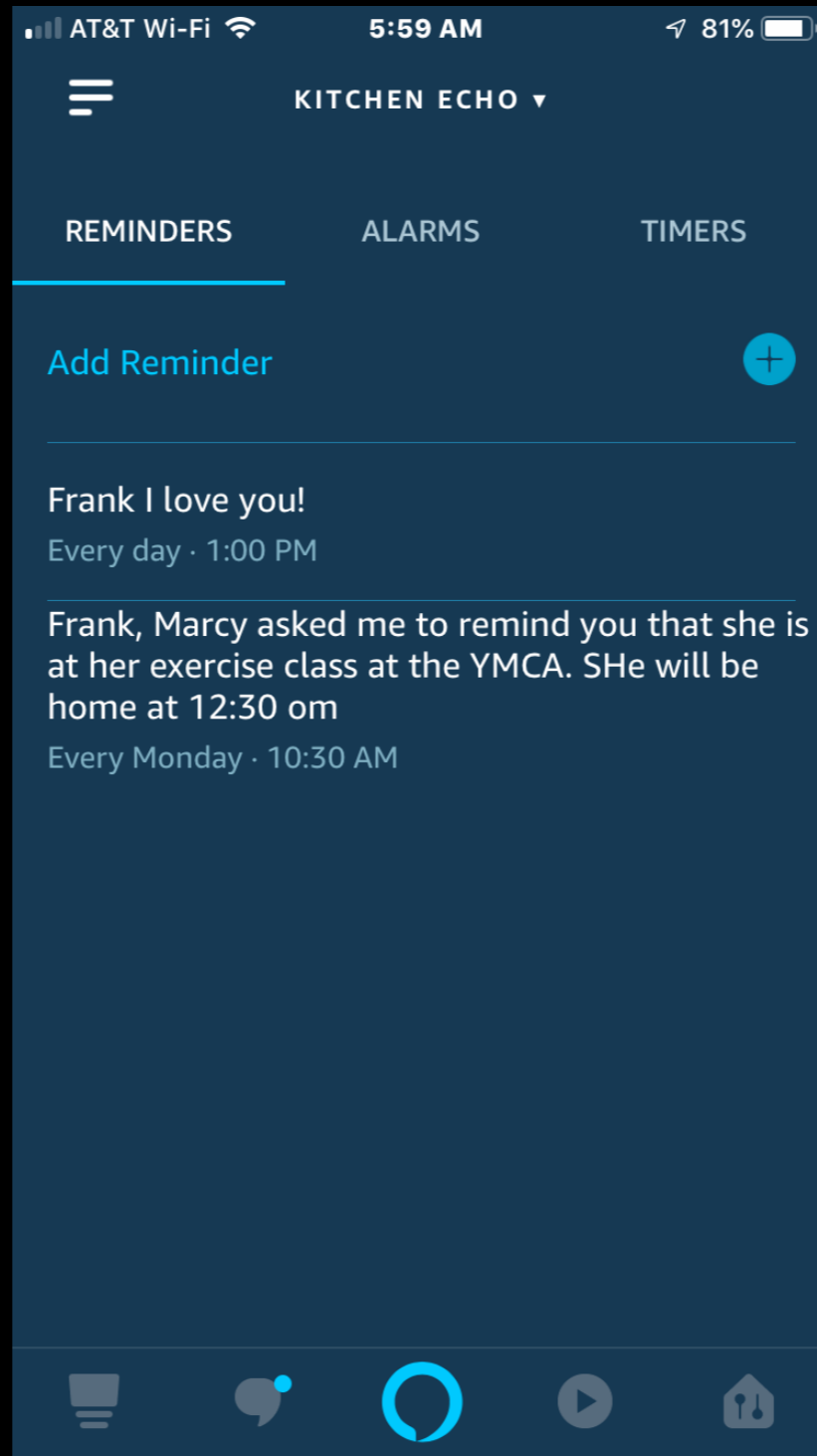
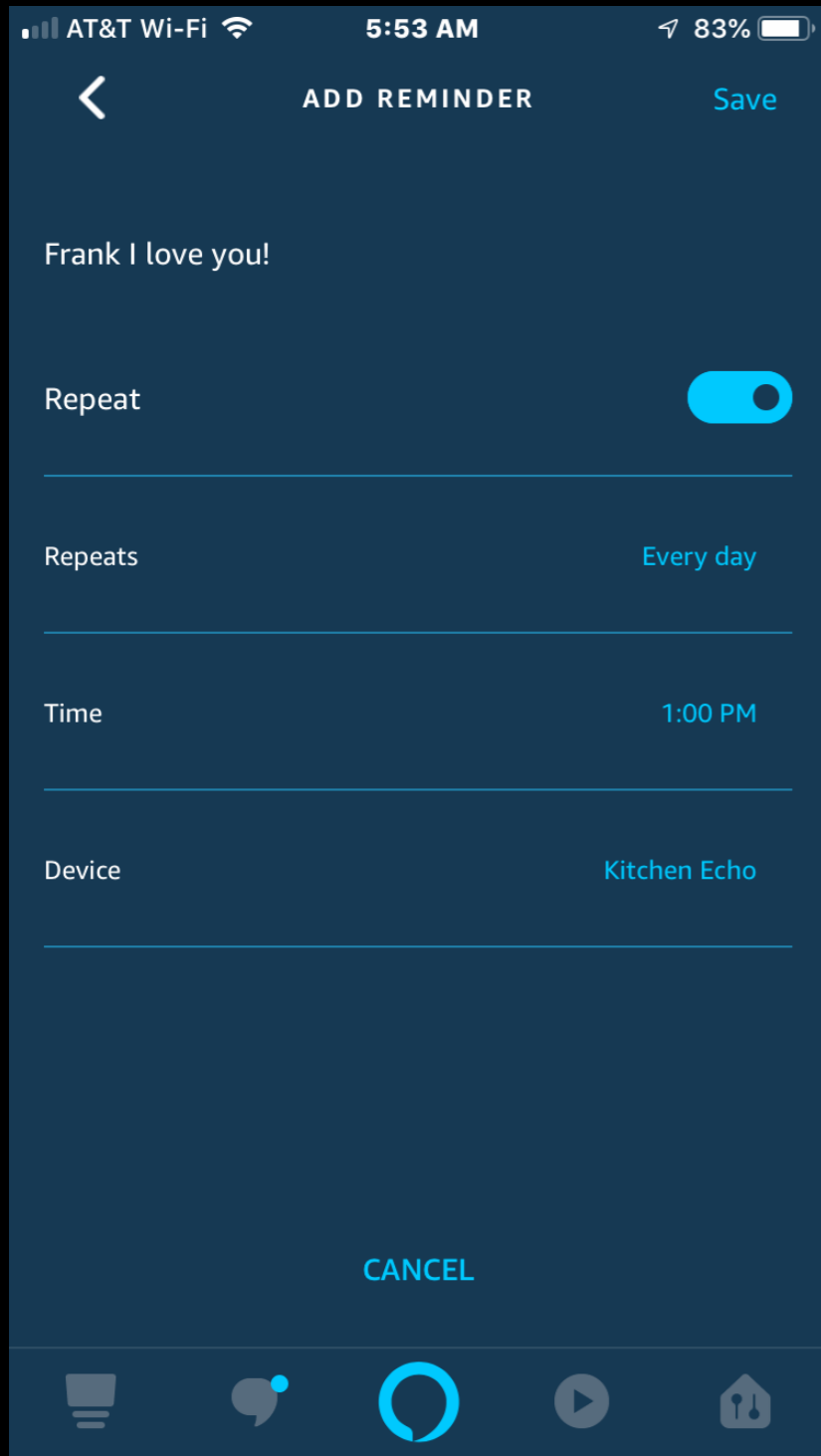


# Amazon Dot: Use

- \* I have a Sonos One with Alexa and two dots. They are distributed around the house to make it easy for Alexa to hear me.
- \* It has been fairly easy to use—but I feel I'm still at the kindergarten level.
- \* Mike King has used this a lot! Let's ask him.







# Amazon Dot Screen Shots



# Lutran Motion Sensor Switch



# Lutron Motion Sensor Switch: Pros/Cons

- \* Hands-free lighting —hurray!
- \* Saves electricity by turning off automatically (because I forget to turn lights out).
- \* Best used in areas that you are in and out of quickly.
- \* Not so good in a room that you stay in for a long time—if you are still, it will turn off when you need it most.



# Lutran Motion Sensor Switch: Use

- \* Installed in six areas: master BR closet, master BR water closet, hall bathroom, pantry, utility room, and garage
- \* Love being able to walk in and out of a room without touching the light switch and knowing it will go off later







**Wall Outlet with 2 USB Outlets**



# Wall Outlet with 2 USB Outlets: Pros/Cons

- \* Not really necessary but really is convenient.
- \* Not cheap to install unless you can do it yourself.
- \* We installed two of these on the kitchen island; one or two of the USB outlets are almost always in use.
- \* Really great for house company.
- \* Comes under category of “build it and they will come.”





# Wall Outlet with 2 USB Outlets: Model

- \* I don't remember the brand, but I believe I purchased it from MacSales (no longer carried)
- \* This is a Class 2, 5VDC 3.6A
- \* Very common now; just research and purchase the most common one used





# Kasa Smart Plug by TP-Link



# Kasa Smart Plug by TP-Link: Features

- \* Works with Amazon Alexa, Google Assistant, Microsoft Cortana, NEST, and **IFTTT**
- \* Simple and inexpensive
- \* Scheduling, remote access, and an away mode
- \* You can pair it with Alexa or Google Assistant and enable voice control
- \* Energy monitoring



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**IFTTT** is “If This, Then That” (part of a free web based service to create simple conditional statements called applets that allows you to connect services together so that they are automatically completed **(Ask Johnathan!)**)

# Kasa Smart Plug by TP-Link: Cost/Ratings

- \* **Amazon**

- \* Ratings—4.4 stars (67% — 13,016 reviews)

- \* Cost: \$16.99

- \* **B&H**

- \* Ratings (4.5 stars — 49 reviews)

- \* Cost: \$16.99





# Kasa Smart Plug by TP-Link: Pros/Cons

## \* **Pros:**

- \* Really easy to install
- \* App is easy to use
- \* Inexpensive



# Kasa Smart Plug by TP-Link: Pros/Cons

- \* **Cons:**

- \* Size of plug takes up the entire outlet

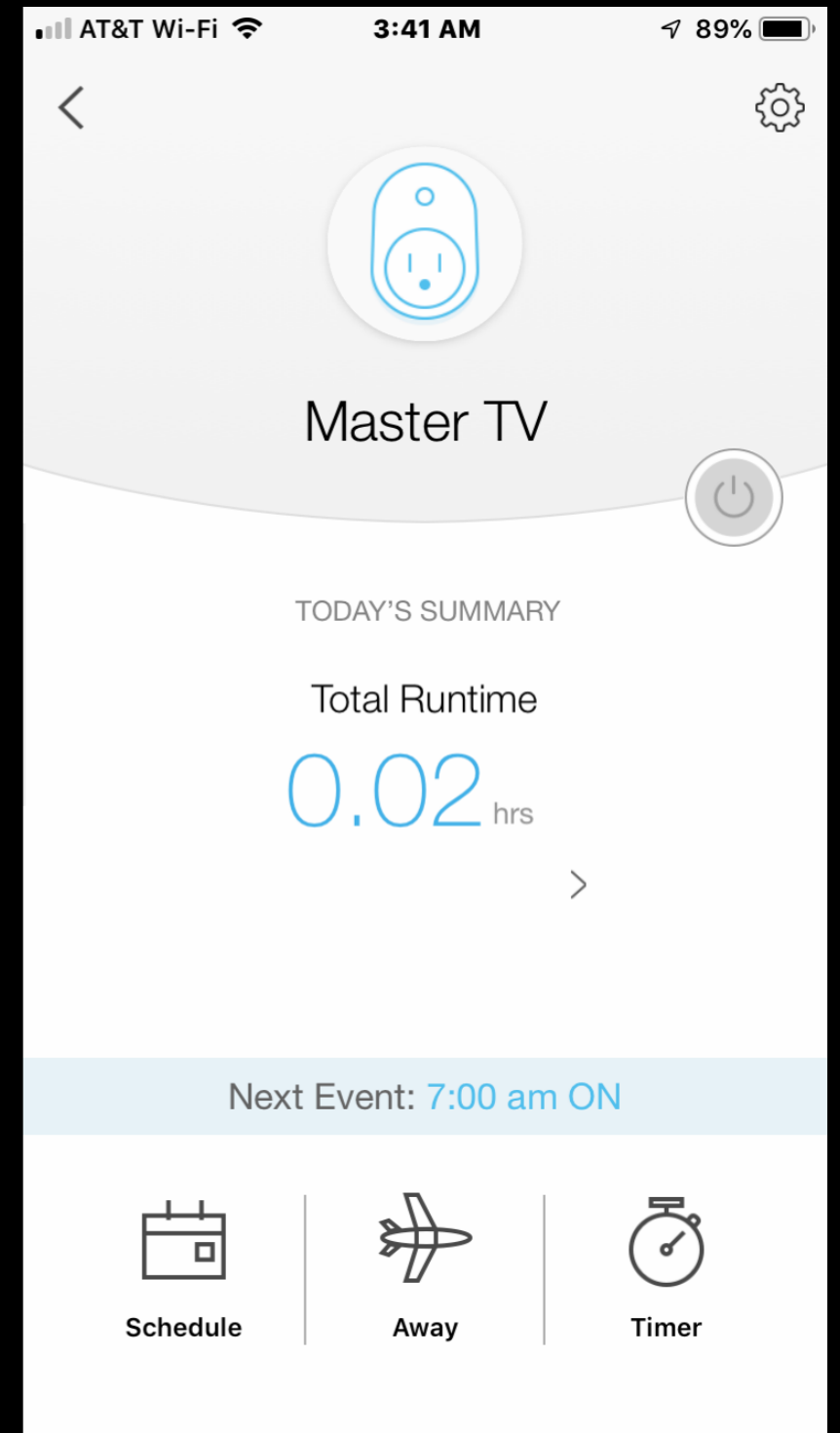
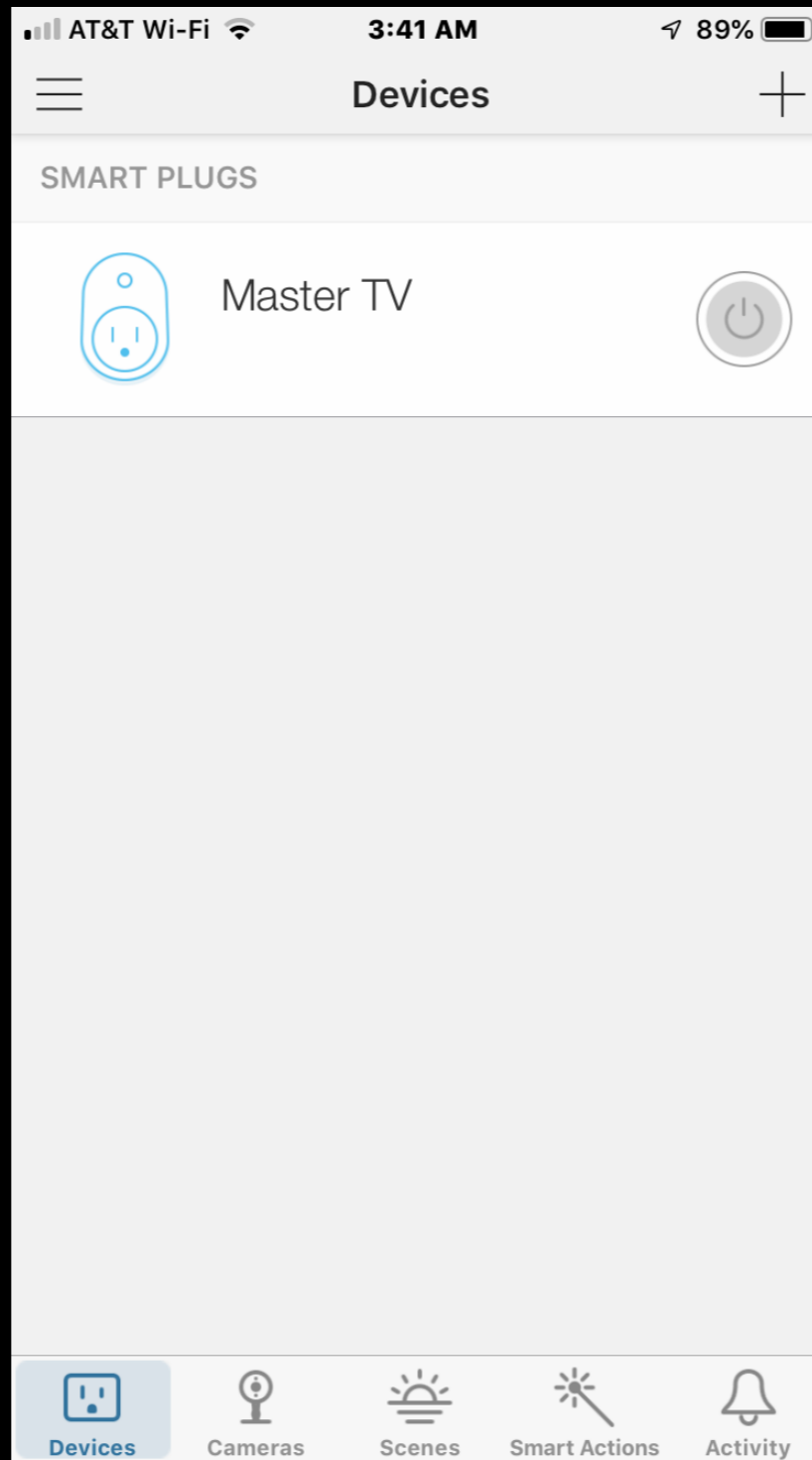
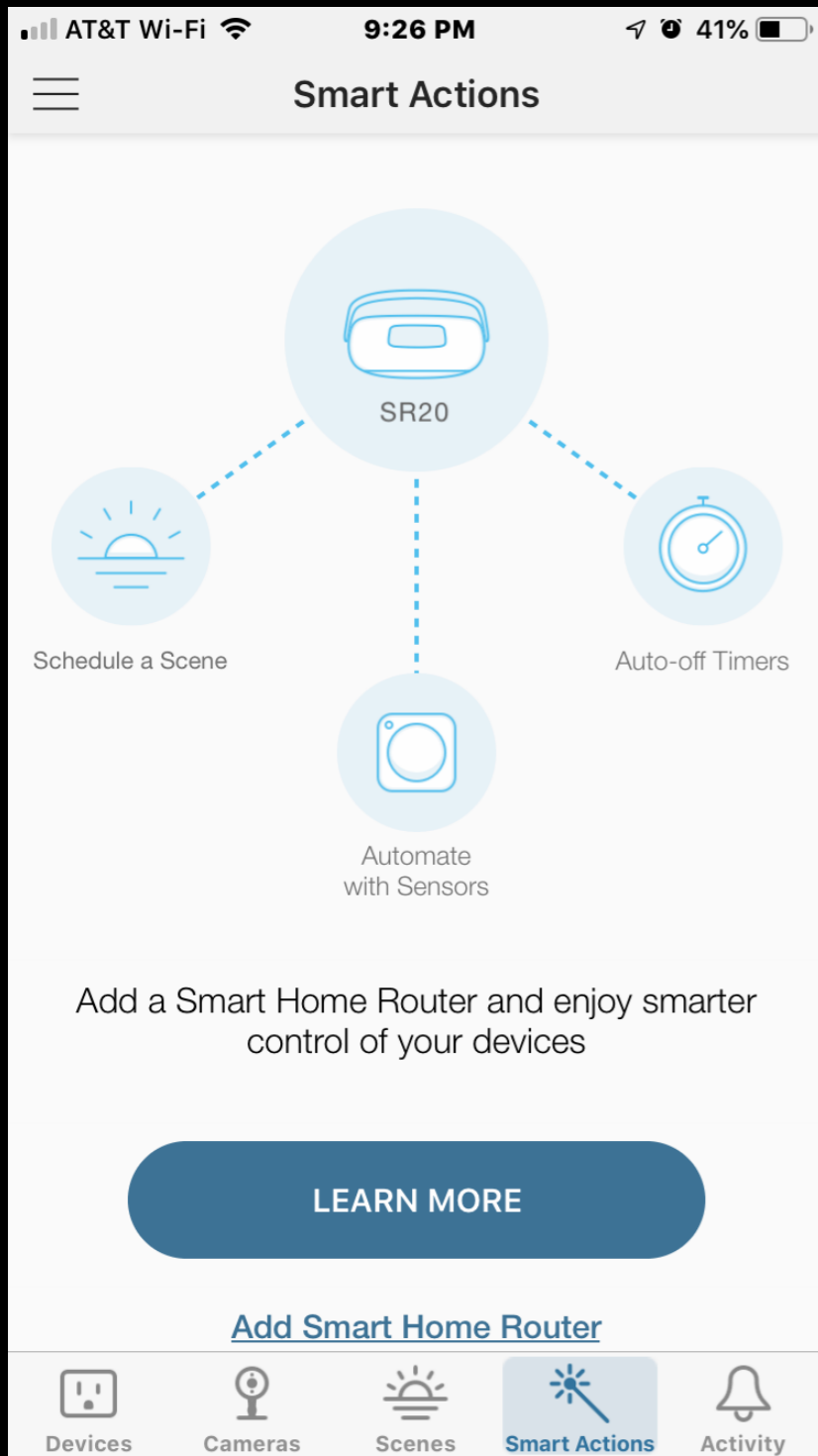




# Kasa Smart Plug by TP-Link: Use

- \* I am using one of these on the TV in our master bedroom
- \* The switch turns the TV off every night, and back on the next day
- \* Mostly I am doing this to help my husband and myself get a better night's sleep (he's one of those 3 second remote clickers)





# Kasa Smart Plug by TP-Link Screen Shots





**WEMO Mini Smart Plug by Belkin**

# WEMO Mini Smart Plug: Features

- \* Control appliances from anywhere or set them on an automatic schedule
- \* Works with Amazon Alexa and Google Assistant
- \* Pairs with NEST Thermostat for automatic away control
- \* Works with IFTTT





# WEMO Mini Smart Plug: Cost/ Ratings

- \* **Amazon**

- \* Ratings—4 stars (59% — 11,011 reviews)

- \* Cost: \$27.90

- \* **Belkin**

- \* Ratings (4.2 — 560 reviews)

- \* Cost: \$29.99



# WEMO Mini Smart Plug: Pros/Cons

- \* **Pros:**

- \* Sort of inexpensive for a smart plug
- \* Best part, it doesn't take up the whole outlet
- \* Works with Alexa and Google





# WEMO Mini Smart Plug: Pros/Cons

## \* **Cons:**

- \* More expensive than the TP-Link smart plug
- \* 8% of the reviews complained the plug did not work with their Wi-Fi and/or it quick working in a short period of time
- \* DID NOT WORK for me. Never would connect to my Wi-Fi
- \* NOTE: Mike King likes his!

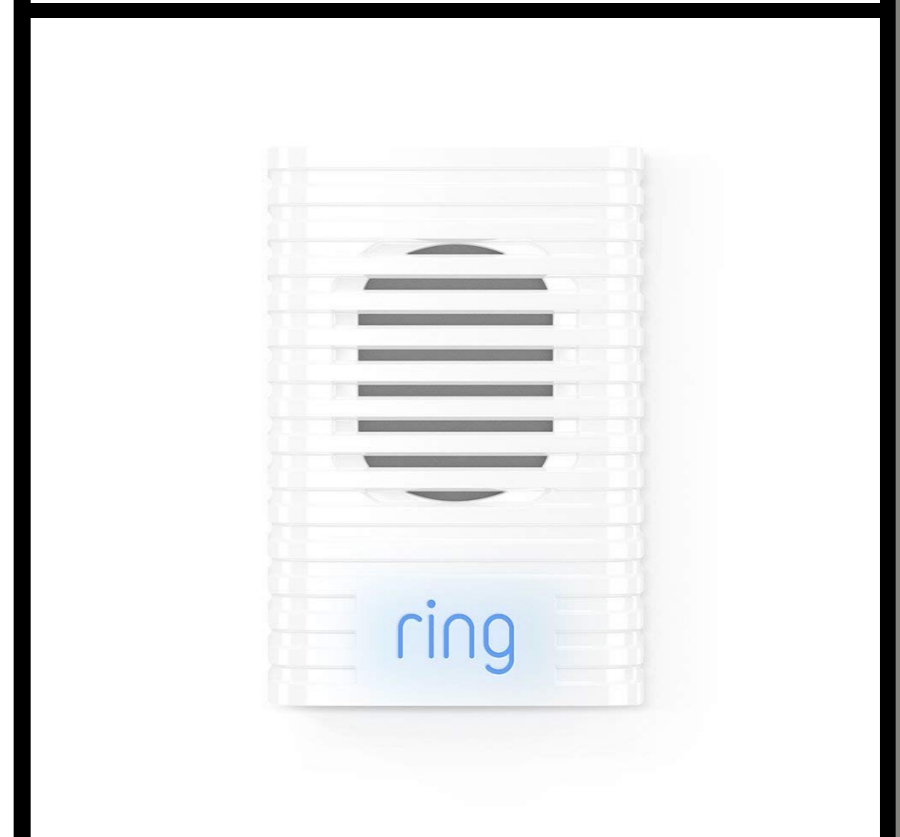


# WEMO Mini Smart Plug: Use

- \* I tried to install one of these but I could never get it to work







# Ring Video Doorbell Pro

# Ring Video Doorbell Pro: About

- \* Motion activate alerts
- \* Answer your doorbell from anywhere
- \* Video on demand with live view, 1080HD, two way audio
- \* Compatible with iOS, Android, Mac, and Windows 10 devices
- \* Battery operated (doesn't work as well) or uses existing doorbell wiring
- \* Using infrared night vision





# Ring Video Doorbell Pro: Yikes!

- \* I haven't had a chance to install this yet; I have a problem figuring out how to do the wiring (boring story)
- \* We will defer to Mike King who has this up and running, including the Ring Chime pro



# Ring Video Doorbell Pro: Cost/Ratings

- \* **Amazon**

- \* Ratings—4 stars (68% — 12,221 reviews)
- \* Cost, wiring required: \$249.00

- \* **Ring**

- \* Ratings (none available)
- \* Cost: \$249.00





# Parting Thoughts

- \* Unless you are planning a major commercial installation solving really big problems—you may want to consider your home installation a new hobby. Your spouse will!
- \* It gets expensive pretty fast.
- \* The Echo products can be useful. They have more options than most of the devices—but the quantity of choices and whether they are really useful can be like “white noise.”
- \* I will admit to enjoying bossing my light bulbs around.
- \* You will need to be vigilant at updating your “smart” devices. Not all of them are automatic. That part is like having another “job.”