TAKE CONTROL OF
APPLE HOME AUTOMATION

Get started with HomeKit-compatible smart home products

by JOSH CENTERS

$14.99
What Is Home Automation?

- In short: greater control of things around your house
  - Things like switches, light bulbs, thermostats, etc.
  - Also includes connected sensors for temperature, humidity, air quality, smoke alarms, etc.
- Control or monitor them remotely — manually or automatically
Barriers to Home Automation

• Home automation isn’t new - around since at least the 1970s. Popular for home theater setups for decades.

• Cost — devices traditionally very expensive to buy and install

• Complexity — often required special installation

• Security — “Will my house get hacked?”
2010s: Home Automation Enters the Mainstream

- Thanks to smartphones, tablets, and smartwatches, new, simpler products are enabled
- Nest — first mainstream smart thermostat
- Philips Hue followed soon after, with colored LED lightbulbs
- Belkin WeMo popularized smart outlets
- Problems remain: separate app for each device, no voice control *show them Hue and ecobee apps*
HomeKit to the Rescue!

- Introduced in iOS 8. Devices not available until iOS 9.
- Siri-only at first
- iOS 10 introduced the Home app, a centralized app to control home automation devices *show them the app*
- Also available in Control Center and on Apple Watch. Siri control via Apple TV and HomePod.
What Exactly Is HomeKit?

• It’s a framework for developers

• Apple's Home app isn’t the only game in town
  • Alt. apps: Elgato Eve, Home (yes, there’s another one), HomeDash, myHome

• It’s an ecosystem for devices

• All HomeKit devices are approved by Apple
HomeKit Advantages

- Integration: all HomeKit devices integrate with iOS, tvOS, watchOS, and HomePod. That includes Siri and Control Center.

- Interoperability: different devices from different manufacturers can work together through HomeKit.

- Security: Apple vets all devices and maintains high security standards for HomeKit software.

- Sharing: HomeKit makes it easy to share access with family members.

- Ease of Use: about as simple as home automation gets.
HomeKit Drawbacks

- Doesn’t work with all devices, only those approved by Apple
  - Limited device availability
    - Because devices must be approved by Apple, this limits the pipeline
    - It also increases costs; HomeKit devices are more expensive
More HomeKit Drawbacks

- Security isn’t perfect
  - Major vulnerability in late 2017 — BUT it was fixed promptly
- Doesn’t work with the Mac
- Doesn’t work with some advanced features (can’t animate lights)
- Apple’s Home app doesn’t support all functions, must go to other apps
Your First Device(s)

• Look for the Works with Apple HomeKit label

• I recommend outlets or smart bulbs
  • Easy to setup, relatively cheap and risk-free, and maximum bang for buck
  • Others recommend smart switches, but they take wiring

• Consider products with broad support like Hue and Wemo
  • But both require hubs and more security headaches
Considerations

- What problem am I trying to solve?
- Will my housemates understand this?
- Will my house still work like a house?
- What if something goes wrong?
The HomeKit Hierarchy

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- Homes
- Zones
- Rooms
- Accessories
- Services
Other Important HomeKit Concepts

- Grouping: group devices together
- Two bulbs in a light fixture
- Scenes: group actions together
  - Example: “Good Night” — turn off or dim lights, turn up thermostat, lock the door
- Automations: perform actions automatically
  - Activate Good Night every night at 10 PM
HomeKit Hubs

• A hub is needed to control automations away from home or to create automations

• A hub can be:
  • HomePod
  • Apple TV
  • iPad

• HomeKit hubs also work as Bluetooth extenders!
Ten Commandments of Automation

• To avoid “haunted house syndrome”
• Start small
• Use automations to reduce friction
• Consider actual usage patterns
• Choose the correct triggers
• Communicate with your housemates
• Make natural automations
• Test your automations
• Adjust your automations
• Do not become overly reliant on your automations
• Do not implement frivolous automations