Home Automation

Smart Speakers, Bulbs, Plugs, and More

By

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Agenda

- Why Home Automation?
- What is a Smart Home?
- Smart Speakers
- Smart Light Bulbs
- Smart Plugs
- Smart Light Switches
- Smart Thermostat
- Smart Washer / Dryer
- Questions

Why Home Automation

- Security
- Comfort
- Energy Efficiency
- Convenience
- Control of Devices while away from home
- Control of Devices for people with limited mobility
- Fun

What is a Smart Home?

- The term "smart home" is used to describe a residence that has lighting, appliances, heating, TVs, air conditioning, entertainment audio and video systems, computers, cameras and security systems that can communicate with one another and be remotely controlled from any room in the home, as well as remotely from any location via a smartphone or the internet.

- Control can be done via

  - Smart Phone using one or more Apps

  - Voice

Smart Speakers

- What is a Smart Speaker?
  - Device that Listens to your voice and follows commands
  - Google Mini / Echo Dot (Alexa) are examples
- What can a Smart Speaker do?
  - Answer Questions eg What is the weather for today?
  - Place Calls to anyone on your smart phone contact list
  - Play music
  - Stream audio from your smart phone
  - Turn on and off smart lights and smart plugs
  - Add things to your shopping list

Things your Smart Speaker can do

- Alexa can order things from Amazon using your voice
- Tell you a joke
- Find your phone
- Translate a word into another language
- Calculate – How many days between Dec 1 and May 15?
- Set up a reminder
- Set a timer
- Play the news
- Control heat or air conditioning
- Set up Routines eg Good Morning, Good Night

Smart Light Bulbs

- ▶ What is a Smart Light Bulb
  - ▶ Fit in your regular light bulbs
  - ▶ Can change its color and intensity (16,000 colors)
  - ▶ Can be controlled by a smart speaker
  - ▶ Two Types: White only or Color
    - White Bulbs can change from cool white to warm white
    - Color bulbs can change color in addition to the cool white to warm white range
  - ▶ Can dim lights to any level from night light to daylight.
  - ▶ Can be programmed to turn on or off at a certain time or at dusk or daylight.
  - ▶ Can be programmed to vary light intensity or color (eg emulate sunset)
  - ▶ 60 watts or 75 watts (flood)
  - ▶ Uses Wi Fi and internet.

Examples of Smart Light Settings

Screen 1 (5:13) — Wynmoor condo - Light

WHITE
- Warm white — 1
- Daylight — 2
- Cool white
- Night light
- Custom white

SIMPLE
- Cozy — 3
- True colors
- Relax
- Plant growth
- Focus
- TV time
- Custom color

Screen 2 (5:14) — Wynmoor condo - Light

DYNAMIC
- Candlelight
- Fireplace
- Fall
- Club
- Sunset
- Romance — 4
- Party
- Pastel colors
- Spring
- Summer
- Forest
- Jungle
- Mojito

Screen 3 (5:14) — Wynmoor condo - Light

- Jungle
- Mojito
- Ocean
- Deep dive
- Pulse
- Golden white
- Steampunk

PROGRESSIVE (30 MIN)
- Wake-up
- Bedtime

CELEBRATIONS
- Christmas
- Halloween

Smart Plugs

- What does a Smart Plug Do
  - Plugs into a Traditional Electrical Outlet
  - Allows you to turn it on or off from a smart phone or smart speaker
  - Can be programmed to turn on or off at a certain time
  - Can be used with a TV, coffee maker, lamp, fan, electric fireplace, etc
  - Uses Wi Fi and internet

Smart Light Switches

- What does a Smart Light Switch do
  - Replaces an existing wall switch
  - Can turn light on and off with smart phone app or smart speaker
  - Can be programmed to turn on and off at specific times
  - Can be programmed to turn on if your security system detects and intruder
  - Can be programmed to turn on if your smoke detector senses fire
  - Indoor or outdoor lights.

Smart Thermostat

- Examples: Google Nest or Ecobee

- Remote control of your thermostat

- Raise or lower temperatures

- Program time of day temperatures

- Sensors available

- Control temperature based on where you are in the house

- Monthly report comparing you to neighbors

- Remote Diagnostics

Smart Washer / Dryer

- ► Connects to home internet
- ► Alerts you when washer or dryer is finished its load
- ► Download special washer / dryer programs
- ► Remote Diagnostics

Challenges with Smart Homes

- Some Set up Required
  - For the Devices
  - For Google Home or Alexa
- Server controlling devices is remote
  - Slight delay
  - If the server is down, so is the automated device
  - Devices work off line (manually)
- Bulbs are assigned to rooms and have names.
  - If you move, ensure your bulbs go into same rooms, or rename them
- If you change your internet modem or password, need to reconnect
- Device Compatibility with Alexa, Google Home and other apps

Questions?

IFTTT If This, Then That

- A software platform that connects apps, devices and services from different developers in order to trigger one or more automations involving those apps, devices and services.

- Free and Fee version

- Prebuilt Apps or Build Your Own

- Examples

  - If you walk into a room, a light will turn on. (Compatible sensor)

  - If you come home a light will turn on.

  - *If* you make a call on your Android phone, *then* a log of that call is added to a [Google spreadsheet].

  - *If* you add a new task to your Amazon Alexa to-dos, *then* it will be added to your [iOS Reminders app].

- Other Alternatives: Smart Things, Zapier, Microsoft Flow etc