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# THE SMART HOME MANUAL

How To Automate Your Home To Keep Your Family *Entertained, Comfortable, And Safe*



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## PREFACE

I'VE WANTED TO MAKE TECHNOLOGY work for me since I was a young child. The advanced technology of TV shows like *The Jetsons* and *Star Trek* inspired my interest in gadgets that make home life more entertaining and fulfilling. As a child, the first home automation I ever created was programming the cable box to change the channel to ESPN at 8:00 p.m. every day so I could watch SportsCenter. Not everyone in the house was happy with that programming, but I thought it was great!

My passion for technology remained a constant force in my life. I've spent most of my career in technology—working as an IT help desk technician, a software developer, a business systems analyst, and eventually an IT manager. Although I love that IT management allows me to strategically direct the work of others, I really miss the hands-on technical work that I used to do.

I've filled that hole by taking on various technical projects around my house. I first started building my smart home around 2006. I spent a lot of time trying to stream media throughout my house. I ended up learning a lot about home networking, cybersecurity, and streaming media devices. I learned the value of automation and remote

access to my home as I branched out into installing timers for my outdoor lights, a W-iFi-enabled thermostat, and an Internet-connected home security system.

My smart home projects exploded when we moved into a new home eight years ago. I imagined all sorts of smart home functionality I could add to make our lives more convenient. Ours being a new home, I wanted to do everything right. So I took the time to learn about smart home hubs, smart home protocols, and all the various smart home devices out there, and put together a plan. Piece by piece, I added smart lights, smart plugs, smart switches, smart door locks—the list goes on.

My family was a little hesitant about my projects at first. What if something goes wrong and our lights stop working? What if you hurt yourself installing a smart switch? Over time, these fears completely disappeared, and now my family has become reliant on our smart home technology and security. They love knowing that lights around the house will come on and turn off at the right times without any intervention. They love being able to turn on lights, TVs, the fireplace, and even the robot vacuum with a simple voice command. They feel safer knowing that we have a 24/7 surveillance system, doors that lock on their own in case we forget to lock them at night, and panic buttons placed around the house that silently send distress messages to loved ones.

I'm very proud that my family can use the features of our smart home without a manual. Everything just works, and I think they take a lot of it for granted now. I'm also proud that even when the Internet connection is down many things continue to work. The worst that happens is that some things operate as they would in a normal home.

I wrote this book because I want others to share in the joy, convenience, and security of a smart home. I want to help people get off to the best start possible in achieving their smart home goals. I hope this book provides you with education and inspiration, eliminating your frustration. Technology has advanced in ease of use to the point where anyone can build a smart home. Now is the time to start building the smart home of your dreams!







## ABOUT THIS BOOK

### *Whom Is This Book for?*

ALEXA. GOOGLE ASSISTANT. SMART SWITCHES. Smart plugs. Smart lights. Smart, smart, smart, smart! These days, it's hard to turn on the TV, browse the web, or consume social media without being inundated with ads and articles about smart devices for your home. There's a good reason why smart devices get all this attention. They're impacting our lives more and more every day.

The collection and collaboration of smart devices in your home make up what is commonly referred to as a smart home. Smart homes help people keep tabs on their families and homes. Smart homes help keep people safe, warm, and secure. Smart homes lift the burdens of mundane tasks that we get tired of or have a hard time remembering to do. Most importantly, smart homes make our lives better.

This book is for those of you who've gotten the smart home bug. You want the convenience and cool factor that you hear and see in the media, but you are unsure where to start. Or, you've got a few smart devices and you want to

know how to make them work together so you can make the most of them. Perhaps you've been tinkering for years and want to take your home automation to the next level. If any of these sentences describe you, then this book is for you.

By the time you are done reading this book, you'll know the following:

- What a smart home is and what it can do for you
- How much a smart home costs
- How to get started building a smart home from scratch
- How to pick the right smart home devices for your situation
- How to plan for the future of the smart home
- How to secure your smart home (very important!)

While this book focuses on those who want to build their smart homes themselves, it is also useful for those who want to pay someone to do everything. Having knowledge of the smart home concepts, technologies, and capabilities will help you direct your smart home builder to create the best result for you. If any of this sounds interesting to you, keep reading!

## ***How to Use This Book***

This book steps you through building a smart home from the ground up. You can read through it sequentially and learn everything you need to go from zero to smart home in no time flat. This book has information that helps you build the foundation of your smart home, including planning, installing, and enhancing your smart home.

However, many of you will have some of the pieces put together already. Maybe you already have a home network you feel provides you with enough speed and security. Maybe you already have a few of the smart home pieces together and you're just looking for inspiration to make everything work better together or improve on your smart home capabilities. In that case, this book can also be used as a reference. You can skip right to the sections you want for everything you need.

Also, be sure to take advantage of the glossary of terms, checklists, and additional resources in the appendix. Smart home technology involves a lot of jargon, and the glossary is really helpful with explaining technical terms. The checklists give you a quick way to track accomplishing some of the recommendations in this book. Finally, the additional resources that the appendix provides are links to up-to-date smart home web resources. These sections come in handy even after you have read the entire book.

## ***Conventions Used in This Book***

Here are the conventions used in this book, which highlight important information:

- **What I Do:** In several sections of this book, I give specific information about how I address the topics discussed in the context of my own home. For example, in the home network section, I discuss the router I chose and some of the security steps I've taken in my own home. This is intended to give you a real-world, practical example of something you can do.

- **Key Takeaways:** At the end of each part, I provide a checklist of the key information that you can use as a summary for quick reference.
- **A Day in the Life:** Each part also ends with an example of what life could be like in your smart home.