

SPECIAL REPORT

Smart Home & Home Theater Design

How To Design A Smart Home You'll Love.

One you use

One that works

All while saving thousands

By Matt Montgomery

The Big Idea Behind This Whole Book

You're building or remodeling your dream home, and you're going to invest a ton in the tech.

In fact, the data shows you'll likely spend 5-10% of your home's budget on its tech.

You want to feel good about that investment. And we want that for you too.

If you hate the tech in your home, it's almost certain to be for one of three reasons. We call these the Big 3:

1. **It Doesn't Work** – Either It doesn't work, or doesn't do what you thought it would
2. **You don't use it** – either because you think it's lousy, it's hard to use, or just plain doesn't work
3. **It cost too much** - You spent money on tech you don't use

But here's the ***Good News***. It's easy to design a system you'll love.

I'm going to show you the **3 Steps** to make sure your home rocks (and better than anything your neighbor has).

And in case you're wondering, it doesn't matter if you use Control4, Crestron, Amazon Alexa, if you DIY the system, or hire a dealer.

Whatever system and tech you use, I'm going to show you how to be sure you crush the Big 3:

1. Your system does what you thought it would
2. You use it, and enjoy using it – novel idea right!
3. You don't hate what you paid for it.

Basically, it won't suck, so you'll love your system!

Intro

In case we've never met, I'll give you a (mercifully brief) intro.

I'm one of the founders of Tym.
Our projects gained national attention in print and online publications after winning a series of national awards.



Among those awards, our team won 3 consecutive years for Best Theater in its class, and once for Custom Smart Home from CTA at the CES show in Vegas.



I started writing blogs, and posting videos on YouTube to answer the questions Home Owners were sending us.

That led to the creation of our [Design Service](#) and the [Smart Home Club](#), where we help Clients around the country design their Smart Home and Theaters.

This book lays out the process we've developed to design award winning systems, and help hundreds of Design Clients around the country with their system.

More important, it's going to show you how you crush the Big 3, and design a system you're excited about for years to come.



Figure 1 Montgomery Brothers, Tym Founders

The Big 3

Real quick let's unpack the Big 3.

1. Does it do what you thought it would?

Maybe this seems obvious, but it's the number one cause for buyer's remorse in home tech.

Here's a common example (one of many)...

You're watching TV in your Gym (or any room). The sound sucks because TVs don't have great volume, and you think...



Figure 2 Tym Install featured in Electronic House Magazine

‘Well, I’ll just play the sound through my Home Audio Speakers.’

Sadly, it doesn't work. You call your dealer, and he explains you can't play the TV through the Audio speakers.

He suggests you buy more hardware and some additional programming to make it work, or you'll have to live with it.

If this were you, you're not feeling great about your system.

Here's the dilemma, the tech is doing exactly what it's designed to do. It's not faulty, it's not malfunctioning, but it doesn't do what you thought it would, and **that is a problem.**

But... this is an easy problem to solve with one simple step. I'll show you how in a moment.

2. Do You Use It?

There are two reasons you won't use your system.

1. It doesn't work, or
2. It's complicated and just plain sucks to use

Technology isn't perfect. Even your iPhone needs to be power cycled once in a while. It's the same with your Smart Home.

Sometimes it's going to need service and maintenance, but in general your system should perform when it's suppose to.

For better or worse, Systems perform the way they were designed to perform.

I'm not expecting you to design your own system, but there are some basic concepts you should understand to make sure your system works.

3. Are you happy about your investment?

If the system doesn't work, or you just don't use it, you'll feel like you wasted money. That's a problem all on its own.

But there's **an even bigger problem...**

You don't want to buy equipment, and discover down the road you didn't need the tech in the first place.

This is surprisingly common, and of course never popular.

You feel like you wasted money. What's more, you probably downgraded other areas of the project because of it.

Maximizing your tech budget isn't complicated. In a second, I'll show you how we consistently save Clients thousands.

Here's the **Good News** with our process you can design a system that crushes the Big 3.

1. You'll enjoy using the system
2. The tech will work
3. And you'll be satisfied with your investment.

Here's how it works...

Start with the end in mind

When Design Clients send us their plans, they usually start by asking

“Which System is best?”

Now at some point in the process I want to help you answer that questions but there’s no way to answer it up front.

Here’s something I want you to remember...

‘User Experience chooses the tech’

The worse thing I can do is tell you Control4 or Savant is the best system for you before I know how you’ll use it.

Imagine you’re a car guy. You have a Lambo, a Ferrari, and an electric Porsche in your garage. And you’re on the waiting list for a very exclusive Ferrari.



Figure 3 From Tym Install - Boca Raton

Your friend rolls up on your driveway with a brand new truck. It's the number one selling model in the country, and all the upgrades.

Super nice friend right! There's just one problem. Even though it's an AMAZING truck, **you'll never use it.**

It's the same with the tech in your home.

Before you can decide which System is best, you must know how you want to use the tech in your home.

Here's a recent example to illustrate the point.

I recently had a Design Client (we'll call him Sam) send us his plans and request a Control4 system.

Sam spent a lot of time researching online, watching videos, and decided Control4 was the system he should use.

After we sent him his initial plans, he said...

'Hey I'm 70 years old, I lived in my last home a long time, and I know what I'll use and what I won't. Here's the stuff I'll use.'

It was a large home, and Sam went through and cut all the tech out of the home except his Kitchen, Great Room, and Bedroom.

When we were all done, I said Sam I'm happy to spec out a Control4 system for you, but you don't need it.

Once we understood how Sam would use the tech in his home, it became very clear what system was best for him.

Now you may be thinking this sounds obvious, but there are two reasons this doesn't happen in the real world.

First, dealers are highly incentivized by manufacturers to sell you the brands they carry.

Intentions are great. Dealers want you to have a system you'll love, but it is what it is. A Control4 dealer needs to sell you Control4, a Savant dealer Savant and so on.

There's a solution for this, but we'll get to that in a few pages.

The second is the way the system is designed.

Remember, **User Experience Chooses the Tech**. If you choose the tech first, you'll be disappointed with your system.

So here's what you do.

You're going to design your system before you ever meet with a Dealer. And don't worry, you don't need to be techie.

This isn't something you need to study or research. It will be simple, and I'll walk you through it.

I recommend printing out your floor plans, and grabbing some colored sharpies.

You're going to walk through each room in your home, including outdoor living areas and ask yourself **Two Questions**.

'What tech do I want in here?'

And...

‘How will I use the tech in here.’

Let’s use the kitchen as an example. Say you’re sitting at the island, what tech would you want to use?



Figure 4 Tym Install

You think about it for a minute and decide you’d want the following tech:

- Speakers for music
- Motorized shades
- Lighting control
- Voice Control

Great! Now ***how will you use the tech*** in that room?

To keep it simple, let's just look at the speakers. When you're using the Audio system, what will you listen to?

You realize you spend most your time listening to Apple Music, and audio books on Audible. Great!

Let's look at how these answers effect your system.

At first you wanted speakers in the Kitchen. With that info, you could use almost any system on the market.

Control4, Savant, Crestron, Sonos, VSSL, VAIL, Amazon Alexa... and you get the idea. Any of those would work.

But everything changes when you say Apple Music and Audible. Here's the kicker, most audio systems do not natively support Apple Music or Audible.

You can get there, but you'll have to either

1. Integrate 3rd party products and add extra hardware to make it work, or
2. Change the hardware and design all together to a system that natively supports Apple Music and Audible.

Imagine you've just moved into your new home, you turn on the speakers, and Apple Music won't play.

You call your dealer and you learn your brand new system (the one you paid thousands for), won't support Apple Music.

You'll either have to use a different music source, or buy additional hardware and programming.

You probably wouldn't love this answer, who would?! And yet this is a very common scenario.

And the problem repeats with all the tech in the home, motorized shades, lighting control, voice control, tv, etc.

Certain features you would expect to be obvious, aren't available across all lines and manufacturers.

Again, it's the challenge of matching your expectations to the system and hardware that deliver that experience.

To get it right, we have to know not just what tech you want in the room, but exactly how you see yourself using it.

A meeting at Starbucks...

The Smart Home industry loves to hype the Internet of things, or this idea that devices connected in the cloud can all talk to each other.

Here's the problem with that idea...

Let's say you and I decided to meet at Starbucks to talk about your System Design.



There's one catch...

You and I speak different languages. How well is that conversation going to go? Not well.

Just because smart devices all connect in the cloud, doesn't mean they speak the same language.

If you and I wanted to have a conversation, we'd have to find a translator, and preferably a good one.

It's the same with Smart Devices, they use a translator (some fancy programming) to talk to each other.



This is what we call '**integration.**' Programmers write code to help two devices talk to each other.

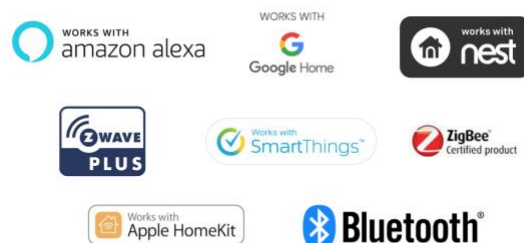
Why does this matter? Oversimplifying, there are two types of integration, or what we call '**Programming.**'

1. **Certified** Programming
2. **Custom** Programming

Certified programming happens when engineers from both companies come together and say,

'Hey we want our devices to communicate together well. Let's write the code and support it together!'

When you see 'Works With Alexa' or 'Works With Nest,' that's Certified Programming.



The engineers behind both companies have said, we're guaranteeing these devices communicate.

Then you have **Custom Programming**. And that's custom code written by a really Smart Dealer.

The dealer writes code to force two devices to talk to each other that were really never meant to communicate.

We've got a saying for this, '**Once Custom, Always Custom.**' Here's what I mean.

You pay a Dealer to custom program some tech in your home, and it works. Awesome! Until it doesn't.

Now the follow up service call, warranty to replace the product, or software update requires **more custom programming**.

For the rest of forever, anytime you need service or updates on that custom code, it's going to require more custom code.

There is a time and place for Custom Programming. Sometimes it's the right choice, but 99% of the time it's not.

Just because you can use Custom Programming doesn't mean you should. Given the option, always go Certified.

That's how you minimize service tickets, and ensure you have a system that's fun and simple to use.

You might be thinking, if Certified programming is so much better, why does Custom Programming ever happen at all?

Well there are two reasons...

The Smart Home Spectrum

FIRST, you need to understand the Smart Home Spectrum.

Across the spectrum you'll see all the available tech for a Smart Home.

The Smart Home Spectrum



Figure 5 Smart Home Spectrum by Tym

On the left side we see Security, in the middle automation, and on the right end of the spectrum we have Audio/Video.

There isn't a Smart Home Platform on the market that can completely cover the Spectrum without integration.

Let me say that again, there isn't a Smart Home Platform on the market that can completely cover the entire Spectrum natively.

At some point in the process, every Smart Home Platform must integrate with 3rd party products to cover the spectrum.

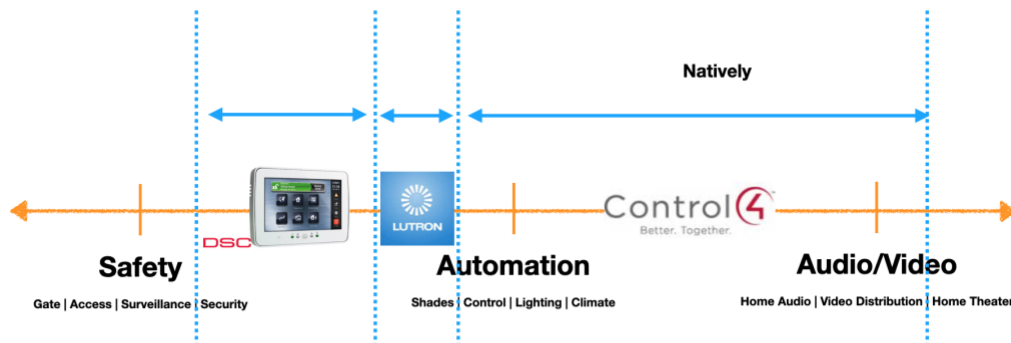


Figure 6 Control4 integrating with Lutron and DSC to cover the spectrum

A lot of people come to us and say I'm just going to use Amazon Alexa because it can handle everything in the home on its own.

Well not exactly.

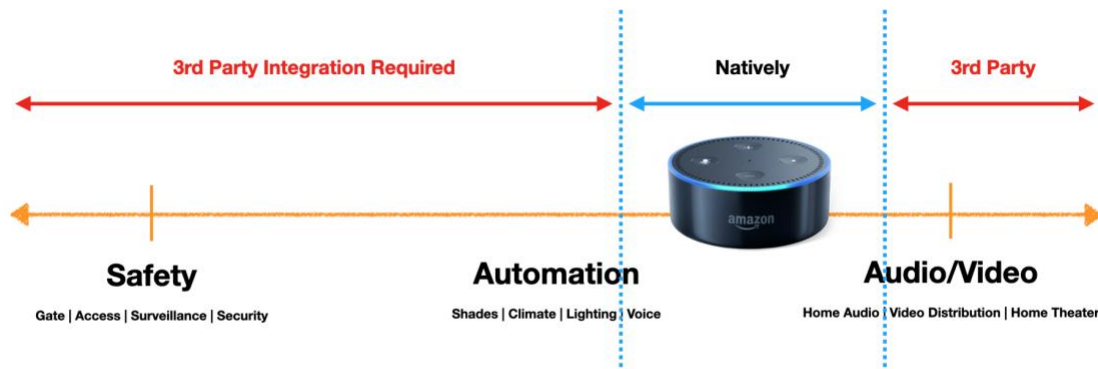


Figure 7 Alexa needs 3rd party integration to cover the spectrum

Do you want shades? Then you're going to integrate with Lutron, Somfi, or maybe Hunter Douglas.

Do you want Security, then you'll integrate with a service like Alarm.com.

This is true with Crestron, Alexa and everything in between.

It doesn't matter what platform you use. You're going to integrate with 3rd party products.

So, you're going to have to make choices between Custom and Certified Programming.

SECOND...

The design process is about managing compromises.

As you do your research, you're going to find two products you want that are incompatible.

You may have to give up something to get what you want most.

A design Client of ours in Boca Raton really wanted USAi lighting, as well as Josh.ai for Voice Control.

At the time, USAi only worked with Savant, and Josh.ai only worked with Control4.

If he went with Control4 and Josh.ai, he'd have to give up the USAi lighting.

If he went with Savant and USAi lighting, he'd have to give up the full power of Josh.ai.

He decided to go with Savant and USAi lighting.

The project turned out pretty cool don't you think!



Figure 8 Savant and USAi Lighting Job by Tym - Boca Raton

As you're researching solutions for your home, you fall in love with tech that requires custom programming.

In the case of our Boca Raton client, the USAi and Savant integration required TONS of Custom Programming.

It's not ideal, but he knew up front what he was getting into, and moved forward with eyes open.

He knows he'll need regular TLC on his system. If you don't have the stomach for that, then you choose a different option.

Again it's about managing compromises, the important thing is that you are eyes open about these kind of decisions.

How Bout Saving Some Cash

You can almost always save money on your System Design, or at a minimum reallocate funds to the parts of the system you want most.

A quick disclaimer, we're not a discount barn. Our [Design Service](#) and [Smart Home club](#) aren't built to lowball or undercut the industry.

The industry has all kinds of MAP Pricing and protections, and we're not here to show you tricks on how to bypass that.

We all lose in the race to zero, BUT...

We can help you save money. We do it all the time.

Our Design Clients routinely find their designs are 10% lower than previous quotes. Here's why.

In almost every system design and quote, you'll find **System Bloat** or equipment you'll never use.

Let me be clear, dealers aren't trying to screw you, they don't have bad intent. There's just TOO MUCH tech to sort out.

At some point in the home building process, you throw your hands up and say,

'Look, I don't have time for all this. I trust you. Just tell me what I need, and we'll go with it.'

The dealer loves Video Distribution, it's what he would put in his own home, so he specs it out for you.

But it's not anything you'll use, and you don't know that until it's too late.

A lot of this goes back to the first step, asking yourself what tech you want, and how you plan to use it.

A Design Client from Miami beach, came to us with a wish list and a very specific budget.

He wanted Panelized Lighting and Video Distribution, but in all the quotes he'd received couldn't fit both into his budget.

We went through the steps.

1. What tech do you want in each room?
2. How will you use the tech in each room?

He realized he would never use Video Distribution, and if by some chance he changed his mind, he could add it later.

He was able to reallocate those funds and get the Panelized Lighting system he wanted while staying on budget.

That's how we maximized his budget.

The worse thing that happens you move into your new home, and realize you've purchased tech you'll never use.

Slightly less worse, is realizing you didn't get the Projector you wanted, the Shades you wanted, or the Speakers for your Listening room because...

You spent money on tech (you realize now) you'll never use.

Sadly, it's really common, but very avoidable if the system is designed with you in mind.

Designing Your Own System

So to review, you want a system...

1. That does what you think it will do
2. Is easy to use, and actually works
3. Without spending more than you need

And to do that, you need to remember these simple steps.

1. Ask yourself what tech you want in the room, and specifically how you want to use the tech
2. Use Certified Programming whenever possible
3. Maximize your budget by avoiding ***system bloat***

So what next? Where do you go from here?

We've put together two amazing tools to help you design your System. [***The Smart Home Club***](#) and our [***Design Service***](#).

In the Smart Home Club you'll find:

1. Video Courses – we answer your questions, and help you understand what tech you actually need and want, and what it will cost.
 - a. How To Design A Smart Home
 - b. How To Design A Theater
 - c. Building A Smart Home, what you need to know
 - d. How To Wire A Smart Home
 - e. How To Terminate The Wire
2. Live Trainings – we go live weekly. Design Systems, Design Rooms, and answer questions live about the latest tech trends.
3. Online Discord Group – Talk to dealers, and hear from Homeowners around the country to figure out what tech is best for you.

Over \$3,500 of digital courses, ebooks, live trainings as well as the online community. And you get unlimited access to all of it.



You can join the [Smart Home Club here](#)

If you're someone who wants to do your research before you meet with a dealer, the Smart Home Club is for you.

Our Design Service

A lot of Clients find they just want an unbiased opinion from a 3rd party before they finalize things with a local Dealer.

That's why we created our Design Service. We have one for Theaters and one for Smart Homes.

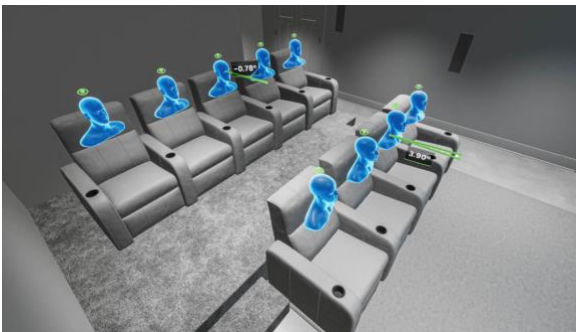
Our award winning Design Team will design a custom system for you, create a budget, and send you a full set of plans.

Our team will answer your questions, and work with you to make sure you're feeling good about all your Tech Decisions.

If you'd rather not spend hours researching, and prefer to have an expert quickly guide you through your options, the Design Service is for you.

Sign up for the [Smart Home Design Service here](#)

Sing up for the [Home Theater Design Service here](#)



If you have questions, reach out to us by email at design@tymhomes.com

If you've read this far, I hope this has provided some helpful direction on your Smart Home.

More importantly, I hope you find the perfect combo of tech for your Dream Home, and that you love it for years to come!

All the best!

Matt Montgomery