Control4 HC-250 Home Controller Review, Part 2: The Home Automation Experience

"Did you leave the kitchen light on?"

"Did you lock the front door?"

"Do you think that maybe you could remember the fact that not everyone has your f***ing vampire eyes and could use a little light when we get home?!"

Those are the sorts of questions that are thankfully never uttered in my home anymore.



As I said in Part 1 of my Control4 HC-250 Home Controller review—"The Home Theater Experience"—the HC-250 is the company's latest home automation system brain. Unlike previous Home Controllers, though, the HC-250 is positioned as a one-room solution for small residences, or a one-room extender for larger systems. And so, the original intended focus of my review was as a sort of uber-fancy remote control for my home theater system, with maybe a light or two added, and once the APIs are released for my ecobee Smart Thermostat and drivers are written for that devices, throwing in some comfort control as well.

In discussing all of the things we could do with the HC-250 in my less-than-2000-sq-ft home with my local Control4 dealer, though, I quickly realized that the little HC-250 had more than enough reserve power to deliver a full-fledged lighting control experience, as well as some security features, in my home. Which, of course, put the scope of the review way over what one write-up could contain. Especially given that, much to my surprise, the extended home automation has really become my favorite aspect of the system.

As I also said in Part 1 (and you should really go back and read it if you haven't), I've been toying around with DIY lighting control for a few years now, consisting of Z-Wave light switches, a server running on my main PC, and an iPhone app. So the concept of living with remote lighting control isn't new to me.

With Control4, though, it feels new. The problem with my previous lighting control solution wasn't just the fact that it didn't always work; it was mostly the fact that remote lighting control, in and of itself—without the robust interaction with other subsystems in

the home—is kind of dumb. At least in a home the size of mine. Yes, it was handy to be able to hit one button and hope that all of the lights in the house turned off at bedtime. And yes, guests marveled at my pulling out my phone, firing up the app, and dimming the lights when we started a movie. About 50% of the time, it actually worked, too.

With Control4, it works every time, with rock-solid reliability, finesse, and precision, all from the same control environment I use for everything else. And again, that's the key thing here: it's not about remote control; it's about having a rich, robust *automated* lighting solution that's truly integrated with the other automated devices in the home. Like the Yale Real Living Touchscreen Deadbolt Locks that I now could not imagine living without.

More on those deadbolts in a bit.

Before we talk about all of the cool sorts of things I'm doing with Control 4 lighting control now, I should talk about the specifics of my system, because it's a bit of an atypical situation. My lights are all wired in a two-wire-often called a "No Neutral Wire"—configuration. While Control4's dimmers support no-neutral installation, its switches don't, and I have several locations in the house—the front porch and back patio, the foyer, the bathrooms (including one crucial bathroom vent)—where I wanted to do switching instead of dimming, mostly because of the presence of LED bulbs, which are a booger to dim. And once my dealer and I started talking about the different things we could do with automated lighting control, those switches became a central part of my plan.



Luckily for me, Control4 is a Lutron partner, and Lutron's RadioRa 2 solution not only offers both dimmers and switches for two-wire configurations, it also integrates beautifully with Control4—if not quite as simply as Control4's own offerings.

Let's talk about a few key differences between the two solutions: Firstly, Control4's own switches and dimmers work on the same ZigBee protocol as so many other components of the Control4 infrastructure. So every light switch or dimmer you add to the system strengthens and extends the ZigBee mesh network, giving you a stronger, more reliable wireless control system. Send a dim command to a switch at one end of the house, and it travels between dimmers, switches—maybe even your thermostat—in little hops before arriving at its destination.

RadioRa 2, on the other hand, operates on its own proprietary RF network, with a central repeater that communicates with each lighting device directly, and connects to your Control4 Home Controller via your home network.

From there, integrating Lutron with Control requires that your dealer know a good bit about programming both systems, because you have to set up the Lutron lights in that company's own software, then generate a list of ID numbers that then plug into Control4's composer software, instead of having them detected directly. There was some confusion about this aspect of the installation with the installer that was sent to my house, so if you've

got an older home and want to integrate lighting with a Control4 system, make sure you iron out all of the specifics with your dealer ahead of time. In my case, said confusion was worked out the next day, but there's a lesson to be learned: when dealing with custom installation, communication is critical. Lots of communication.

Speaking of communication, once you get the Lutron lights set up, programming them in Composer isn't much different from programming Control4's own lights. There are a few things you can't do with the Lutron switches and dimmers, like change the colors of the LED indicators on the devices themselves, nor set up funky custom double- and triple-tap commands that do other things. But with the Lutron switches and dimmers, you do have vastly more color options for the physical devices themselves, and overall, they're much more décor-friendly in my opinion.



For most of what I wanted to do with the system, though—for now, at least—there's little difference between having Control4 switches and dimmers, and those from Lutron, except for price (the Lutron dimmers being a little more expensive), and the fact that Lutron's switches default to a double-tapping behavior that's used way, way more in my home than I thought it would be. The vampire eyes I referred to before are my own. Turn on the kitchen light to full brightness, and I go running like a la cucaracha.

The neat thing is, I now have the kitchen dimmer set so that when I single-tap it, it comes up at 70%, which is about as bright as I can handle. When my wife double-taps it, it comes on at the full strength she desires. And so it goes around the rest of the home. A curious third party could honestly sit in the middle of the house with eyes closed and track the missus and I around the house based solely on single- and double-taps of the lights.

With only 14 lighting loads in my home, I'm not going crazy with tons of different scenes for parties and such. But I do have a few, like "All Off," "Road Trip," and a "Movie Time" scene, which dims the main media room light to 30%, and turns off the lights in the adjoining kitchen and hallway.

But the truly life-changing scene for me has been the one that's activated by the aforementioned Yale Real Living wireless deadbolt. It used to be the case that, when we came home at night, I would enter first and proceed to the kitchen or den without ever hitting a switch. Vampire, remember? Meanwhile, my poor wife would be tripping over the front step, cursing my name, demanding "A little damned light, please?"

After fourteen years in this house, you'd think I'd remember. I never did. And now it doesn't matter if I don't. When we unlock the front door via one of our secure entry codes, the astronomical clock built into the HC-250 Home Controller checks the position of the sun.

If it's within half an hour of going down or after, it then turns on the foyer light, brings up the den dimmer to 50%, and puts an instant kibosh on any and all salty language.

The front porch light also uses the same astronomical clock to turn on at sunset and off at sunrise. But, if for some reason, we've turned it off manually, the system goes one step further and checks to see if we're unlocking said front door via the Control4 MyHome app on our iPhones. If so, it checks the status of the porch light, and if it's off, turns it on to further alleviate tripping and cursing.

You guys, I cannot convey strongly enough *just how much stress* this one simple-to-program integrated lighting scene has alleviate from my life. And it's the sort of thing that any Control4 end-user can easily program with the Home Edition of the Control4 Composer software.



Even on their own, the Yale Real Living locks have unexpectedly become one of my favorite aspects of the system, and amazingly enough, they're the thing that friends and family *ooo* and *ahh* over the most. If you download the Yale app from the Control4 app store, you open up a lot of functionality, including the ability to really easily create up to 250 (!!) individual entry codes, and manage when they're operable (so, say, you could give your house cleaner a code that only worked on Thursdays between 8am and 1pm, which, let's face it, is way more secure than giving her a key to your house that always works and can be duplicated). You can also tie the Control4 system into your security system, as well—assuming it's compatible, which it probably is—and do things automatically disarming your system when you enter your entry code, and arming it via the locks, as well.

It's also just incredibly convenient to be able to unlock my doors via the same MyHome app that controls my lights and home theater system. I often take Bruno shopping at the local PetCo, and tend to come home with way more bags full of puppy stuff than I intended. It used to be a hassle to either take him to the door, juggle my keys and the leash in one hand and a bagful of stuff in the other, or more likely make two trips. Now I can just unlock the front door from the car and mosey on in, no muss, no fuss.

Here, though, we need to talk about how incredibly important home networking is to an advanced automation solution like Control4. When you're talking to dealers, ask them lots of questions about networking. Drill them on this point. Because there are two ways to set up the HC-250 on your local network, and one of them requires a lot more know-how.

I'm a networking junky. So when my installer was setting up the system, I gave him a range of IP addresses I had set aside for home automation. "Start the Home Controller on .140 and go up from there, if you will." He looked at me and said, "Oh, I'm just doing everything DHCP."

Insert sad face here.

The upside to doing DHCP (Dynamic Host Configuration Protocol) is that your router assigns IP addresses to all of the IP-connected devices in your system automatically. It makes it much easier for the installer, because one of the most frustrating things that can go wrong with a network is assigning the same IP address to two devices. The downside to that is that with DHCP, you can't reliably know what the IP address of your Home Controller is going to be—especially after a power outage, when all of the devices come back up and potentially get assigned new addresses—which means you can't do things like port forwarding and remote access.

I've since addressed this problem myself—again, I went through four days of Control4 training so I could update the system when new review gear comes in—but this is absolutely something that you as the end-user would not be able to do, no matter how much of an IT geek you are. So, again, communication, communication, communication; if you want to be able to access your Control4 system remotely, make sure that you stress this up front, because it takes a lot of computer know-how on your installer's part that isn't required for dealer certification.



And you do. Want to be able to access your system remotely, that is. Of course, it requires your purchasing a MyHome license, which is either \$199 for one device or \$499 for as many as your heart desires—iPhones, iPads, Android devices, even your laptop and desktop computers.

Without the MyHome License, and even without MyHome remote access configured properly, it's still possible to remotely access your system via your 4Sight account as long as you have a computer and an internet connection—from anywhere in the world—so if

you're in Japan and think you might have left the lights on, or need to give a guest entry to your house in the event of an emergency, or even peep at your security cameras to see who's ringing the front doorbell (because, really, you can go way wilder with your system than I have thus far, enabling things like text messages when someone comes a-knockin') you can do so. But it's not the most convenient way of doing things, and the whole Control4 experience is all about convenience.

With the network settings of my system properly configured, I can now go ahead and unlock my doors once I get in sight of my house—not just after I've pulled up far enough into my driveway and given my iPhone a chance to connect to the somewhat spotty Wi-Fi signal that circles my home.

Granted, connecting to that Wi-Fi system is now a lot faster than it used to be. When I first had Control4 installed, it was operating on the company's OS 2.2.4. OS 2.3 just hit this month, and one of the coolest new additions is the fact that MyHome now re-connects to Wi-Fi in a snap. The other big advantage of OS 2.3 is that, via the 7" Portable Touch Screen, or the MyHome app on my PC, the end user can now create really sophisticated lighting scenes without every firing up Composer Home Edition. The lighting interface has also been completely re-designed, and now it's much easier to see at a glance which lights are on, and in which state.



I've heard horror stories about Control4 OS updates in the past—problems arising from some devices failing to receive the update, ending up on different operating systems, and causing all sorts of shenanigans. But the day I had my system installed, I updated it from 2.2 to 2.2.4 without a hitch, and the transition from 2.2.4 to 2.3 was also completed in a manner of minutes without a single snag. So apparently the company has either made huge strides in the OS update department, or I've spoken to some unlucky souls about past upgrades.

Getting back the 7" Portable Touch Screen with Camera, though, this is another aspect of the system that I wasn't very interested in at



first—mostly because I've also heard unkind things about Control4's touch screens in the past, but because my iPad tends to stay with me everywhere I go at home. But I'm glad I was talked into it, because it's a really cool dedicated device that's instantly accessible at a touch, and is now conveniently located in a busy walking path in the home—near the kitchen—which makes it handy for those times when you need to turn on a light remotely, or more commonly, want to fire up some tunes without turning on the TV, and without interrupting a really rocking game of Angry



Birds. It's also an incredibly well-built device, reminiscent of a Kindle Fire in size and construction. I'm not entirely sure what sort of beef users had with older Control4 touch screens, but this new one is quite spiffy. It also has access to functions you can't do on an iPad or iPhone, like two-way video intercom capabilities with Control4's new door station, which I don't have, but am seriously considering adding in the future.

I've already cooked up a lot of other new things I can't wait to do with my system in the coming year. One other advantage to going the Lutron route with my lighting is that I now have a RadioRa 2 Main Repeater in place and ready to add things like the company's new and ridiculously inexpensive automated window shades.

That's the thing about the HC-250, though. As I said, it's really billed as a one room solution. And it's a beautiful one-room solution. But once you get a taste of what it can do, you start dreaming up new things to add, new ways to expand your system. And since the entire Control4 family is built on network connectivity and scalability, it's really easy to do that expansion. You can start small—again, a robust home theater control solution, fully installed, for about the price you'd pay for a nice AV receiver—and add new stuff as your budget allows.

I'm warning you now, though: if you really enjoy profanity, there's going to be a lot less of it in your life.

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Control4