

SUBSCRIBE

CEDIA EXPO

CE PRO'S FEATURED TOPIC: > **SHADE CONTROLS**

PREVIOUS ARTICLE

NEXT ARTICLE



TOP STORY



Projects Featuring Shading Systems Double in Just One Year Per CE Pro's 2024 Shading Deep Dive

CE Pro's 2024 Motorized Shade Controls Deep Dive research finds the category remaining on a roll for integrators with median \$25K projects that deploy 10 shades.

LATEST IN MOTORIZED SHADES

[Crestron Experience Center Now Open in New York City](#)

[Projects Featuring Shading Systems Double in Just One Year Per CE Pro's 2024 Shading Deep Dive](#)

[Zebra Shades Gives a Playful Name to a Strikingly Flexible Product](#)

[One Congress Offices and Residences Spring to Life with an Impressive Automation Backbone](#)

[See All Motorized Shades](#)

PREVIOUS ARTICLE

LATEST EVENT NEWS



NEXT ARTICLE

2024 Shade Controls Report

CE Pro's 2024 Motorized 2024 Shade Controls Report Deep Dive research finds the category remains on a roll for integrators with median \$25K projects that deploy 10 shades.

[Learn More](#)

PRESENTED BY



CEDIA EXPO | CONTROL | WHOLE-HOUSE SYSTEMS

OCTOBER 9, 2019

Google Nest Hub Max Not Really 'Interoperable' with other Thread Home Automation Devices

PREVIOUS ARTICLE

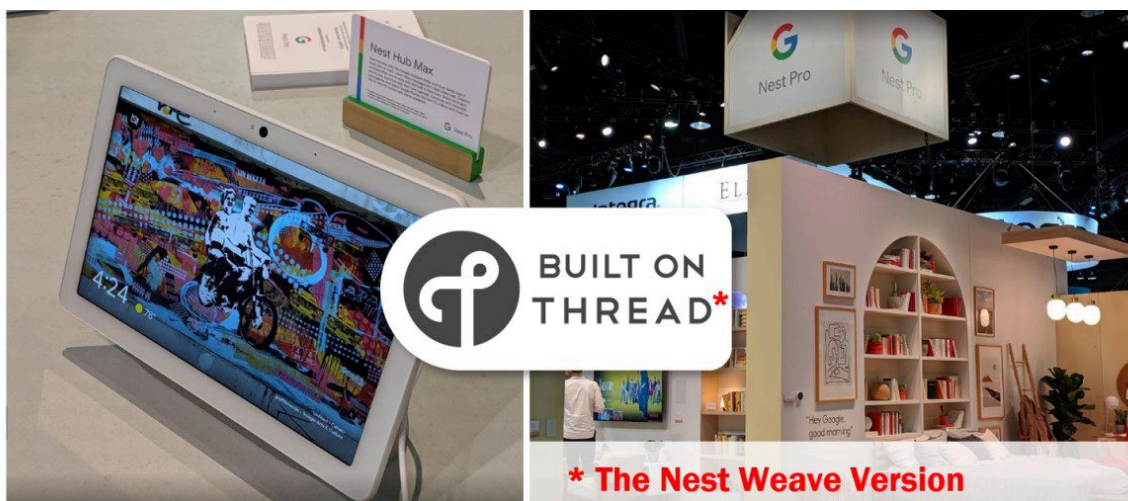
NEXT ARTICLE

As first consumer device 'Built on Thread', new Google/Nest smart display will be "compatible" with other compliant products, but that doesn't mean they'll interoperate in one smart-home ecosystem.

[Julie Jacobson](#)

Updated: October 10th, 2019





Google Nest Hub Max 'interoperates' with other Thread devices running Nest Weave.

ARTICLE: CEDIA EXPO | CONTROL | WHOLE-HOUSE SYSTEMS

OCTOBER 9, 2019

Google Nest Hub Max Not Really 'Interoperable' with other Thread Home Automation Devices

PREVIOUS ARTICLE

NEXT ARTICLE

The new Google [Nest](#) Hub Max (PR below) is the first big news from the combined Google/Nest group since [Nest migrated](#) out of its own "Works with Nest" platform and into the larger Google Home environment.

It is also the first consumer device (as opposed to chipsets and such) certified as "[Built on Thread](#)," the network-layer protocol (IPv6 over 802.15.4) that incorporates mesh technology, security, quality of service and other features for low-bandwidth IoT devices.

Thread is a great protocol for what it does, and a fine way to unite different products and platforms at the network level, but the Thread Group's regular claims of "interoperability" among disparate implementers is a little misleading. Even technology editors cheered the news of Google's Thread implementation as a triumph for home-automation interoperability.

But First: Hub Max Boasts Nice Improvements

Before we get to that, though, there are some very nice improvements of the new Hub Max versus the older Google Home Hub (Mini?). It's just that Thread, per se, is not one of them.

We got our first glimpse of the new product at [CEDIA Expo 2019](#) and it's nice, really nice. I own the predecessor product, and a lot of the improvements are just what the customer ordered, especially a front-facing video camera, which was sorely missed in the first iteration.



2024 Lighting Controls and Fixtures Report

Lightapalooza took place in late February, and the growth of the event has mirrored the rapid ascension lighting fixtures and controls.

[Download your copy now!](#)

FLASHBACK: [Thread's New Certification Mark for Home Automation is Bad for Consumers](#)

Google had maintained it made a conscious effort to exclude the camera in its original Hub because consumers didn't want the invasiveness. So you might think they'd provide a physical shutter for the Hub Max camera, which they don't – just a digital disabler.

Anyway, a lot of wonderful things come with a “built-in Nest Cam” including Google Duo videoconferencing, surveillance (while you're away, of course), and “Face Match” for personalized notifications like upcoming events and video messages.

The sound is improved with bigger and more powerful speakers, which I don't much care about for my own purposes (NPR, nature sounds via YouTube, [C by GE](#) tunable white bulbs with native Bluetooth integration).

RELATED: [TechTalk: How Google Nest is Getting Integrators Involved in 'Connected Home' Sales](#)

PREVIOUS ARTICLE

NEXT ARTICLE

At 3 inches bigger than the original, the new 10-inch screen is great for aging folks like me who have uses like mine, but might scare off others who prefer something more discreet. I like the thought of hand-gesture control for pause and resume, but I don't know how close you have to be for waving to work.

The \$229 launch price is nice, but I don't personally use Google Duo and my current Hub sits on a desk facing me and the wall behind me, so it won't do much good for surveillance unless the bad guy is trying to steal my metal bulletin board (admittedly very cool) and the stuff attached to it.

You still need to pay \$5 to \$30 per month per camera for Nest Aware to get much value out of the devices, which can get hefty (especially compared to the [absurdly cheap Ring ecosystem](#)) for DIY-hard users.

My biggest problem with it (besides the unwieldy name) comes to the little things — primarily the inability to personalize the home screen and a bunch of little UI flaws. Fix those and I'll pay the \$100 premium over my Google Home Hub.

Max is Nice, But Thread Doesn't Much Matter

So, yes, I like what I've seen of Max.

It's just that "Built on Thread" is kind of inconsequential — not useless, but surely not as great as the Thread Group purports: ***"Thread's standardized, open and secure network solves one of IoT's biggest problems: seamlessly and reliably connecting thousands of IoT devices."***

In theory, yes, Thread does "connect" devices at the network layer, but it doesn't make them interoperable, as Thread promises in its press release (below).

You still need a shared home-automation application/protocol for products to interoperate. Currently, Google/Nest is the only one using Google/Nest's protocol, called [Weave](#). Well, then and Yale, which makes the [Nest x Yale Lock](#).

The good news is that Thread and Weave are largely Nest inventions, and it's built into just about every product that Nest has ever made, including thermostats, cameras, doorbells, and [Nest Secure](#), including Nest security sensors. That means Max can communicate locally with other Nest devices, which is pretty sweet. (Note that local communications also is being enabled via Wi-Fi with third-party devices thanks to [Google's new Local Home SDK](#).)

Even after [Google acquired Nest](#) in 2014, the behemoth didn't incorporate Thread/Weave into its own products, except for one of its short-lived hubs a couple years ago. So this is a pretty big deal for the Google/Nest ecosystem.

PREVIOUS ARTICLE

NEXT ARTICLE

It troubles me, however, that Google and the Thread Group are touting interoperability among Google's Thread products and other manufacturers' Thread products, which don't yet exist. Even when they do come to market, unless they're using Nest Weave, they won't work natively with Google's "Built on Thread" products unless they're using Google's Nest Weave protocol.

Asked to comment on interoperability, a Thread spokesperson told me:

You are correct that the Google Nest Hub Max runs Weave over several IP-based networks, including Thread and Wi-Fi. As a Google Nest device, the Google Nest Hub Max works seamlessly with all other products in the Google Nest ecosystem, including the Nest x Yale Lock, Nest Connect, Nest Secure, Nest Detect, etc. As a Google Assistant-capable device, the Google Nest Hub Max can work with and control more than 30,000 devices from more than 3,500 partners via the Google Assistant. Finally, as a 'Built on Thread' certified device, the Google Nest Hub Max can also be used as a Thread router for or in any arbitrary Thread network, regardless of application layer.

Thread Group spokesperson

So in this case, I guess interoperability means that third-party Built on Thread devices can serve as repeater nodes in a Thread mesh, which fortifies the IoT network. That's a nice feature but doesn't really meet my own definition of interoperability. Maybe that's just me.

As [I wrote](#) four years ago, I'm just wondering what happens when consumers see a Thread logo on a non-Nest package and think it somehow works with Nest.

Many tech editors — not to mention the popular press — reporting on the Thread news missed it.

RELATED

- [Nest x Yale Smart Lock Hits Market](#)
- [Latest on Thread, OCF, Weave and ZigBee's new dotdot Home Automation Layer at CES 2017](#)
- [Nest's New Security and Home Automation System: Implications for Thread, Weave, Insurtech](#)
- [Thread's New Certification Mark for Home Automation is Bad for Consumers](#)
- [Can Wi-Fi or Bluetooth Supplant ZigBee or Z-Wave for Home Automation?](#)
- [Led by Nest, Thread for Home Automation is Most Promising IoT Standard Yet](#)
- [When is a 'Standard' Really a 'Standard'?](#)

PREVIOUS ARTICLE

NEXT ARTICLE



- [Three Nagging Questions about Thread Group, the Wannabe Home Automation Standard](#)

PRESS RELEASE

The Thread Group Certifies Google Nest Hub Max as World's First Publicly-Available 'Built on Thread' Device

Thread's standardized, open and secure network solves one of IoT's biggest problems: seamlessly and reliably connecting thousands of IoT devices

SAN RAMON, Calif.– Sept. 11, 2019 — Today the Thread Group announced that the Google Nest Hub Max smart display successfully passed its rigorous specification compliance and interoperability testing to become the first certified and publicly available [Built on Thread](#) device. The Thread Group conducts tests against multiple vendor configurations to ensure that technology from different manufacturers can ultimately communicate, reliably and securely. The Nest Hub Max has proven its ability to do this, and joins the growing roster of [Thread-certified](#) solutions, which currently includes more than 20 components.

The Nest Hub Max can connect to more than 30,000 smart devices from more than 3,500 vendors with the Google Assistant and the Smart Home and Local Home SDKs. Nest Hub Max's Thread support brings the Internet and the rest of the Google Nest home directly and securely to small, power-constrained devices without expensive, proprietary gateways. For example, as a Built on Thread certified device, Nest Hub Max can pair with the Nest x Yale Lock and can extend the range of either Nest Secure or Nest Connect. In the future, Nest Hub Max will be compatible with other Built on Thread certified products, regardless of their manufacturer.

"As a founding board member of the Thread Group, Google has long understood the challenges of IoT, as well as the possibilities and user benefits unlocked by a technology like Thread," noted Grant Erickson, president of the Thread Group. "With that foresight, they've been committed to Thread for more than five years, supporting and driving its development and adoption across the IoT industry's biggest players."

Thread requires less power relative to comparable solutions, which improves the battery life of devices across its network. Thread's self-healing mesh network delivers a reliable and robust network that is complementary to WiFi and Bluetooth Low Energy (BLE), which is critical to delivering on the promise of true IoT for consumers.

Regardless of the specific connectivity technologies used, Thread helps devices talk to different clouds, while simultaneously running multiple application layers, such as Dotdot, OCF or Weave. It does all of this without any additional hardware or software, which saves developers time and money, and promises the end user a lower cost, less power-hungry solution.

PREVIOUS ARTICLE

NEXT ARTICLE

Thread's future-proof technology means certified devices can easily migrate to the [Thread 1.2](#) specification – announced in June 2019 – which improves the network's energy efficiency, latency and node density. Thread 1.2 offers optional support for Bluetooth Low Energy devices, such as smartphones, and standardizes Thread out-of-band commissioning over Bluetooth, making it possible for devices with only a Bluetooth Low Energy radio to be a native part of a Thread mesh network.

Nest Hub Max's Built on Thread certification implementation is based on [OpenThread](#), a Thread-certified open-source implementation of the Thread networking protocol, released by Google and adopted by a number of Thread-certified components.

For more information, visit <http://www.threadgroup.org>, follow [@TheThreadGroup](#) on Twitter, and connect on [LinkedIn](#).

About Thread Networking Protocol

Designed for devices and things in the places where people live and work, Thread is an IPv6 networking protocol built on open standards for low-power 802.15.4 mesh networks that can easily and securely connect thousands of devices to each other and directly to the cloud.

About the Thread Group

Formed in 2013, the non-profit Thread Group is focused on making Thread the foundation for the internet of things in homes and commercial buildings. Built on open standards, Thread is a low power wireless networking protocol that enables direct, end-to-end, secure and scalable connectivity between IoT devices, mobile devices, and the internet. And, because Thread is IP-based, it seamlessly integrates with many environments, apps, devices and clouds. The Thread Group provides a rigorous certification program to ensure device interoperability and a positive user experience. Thread is backed by industry-leading companies including Apple, Arm, Google/Nest, Lutron, Nordic Semiconductors, NXP Semiconductors, OSRAM, Qualcomm, Schneider Electric, Siemens, Silicon Labs, Somfy, and Yale Security.

[Page 1](#)

PREVIOUS ARTICLE

NEXT ARTICLE

If you enjoyed this article and want to receive more valuable industry content like this, [click here](#) to sign up for our digital newsletters!

ABOUT THE AUTHOR





Follow

Julie Jacobson:



Julie Jacobson is founding editor of CE Pro, the leading media brand for the home-technology channel. She has covered the smart-home industry since 1994, long before there was much of an Internet, let alone an Internet of things. Currently she studies, speaks, writes and rabble-rouses in the areas of home automation, security, networked A/V, wellness-related technology, biophilic design, and the business of home technology. Julie majored in Economics at the University of Michigan, spent a year abroad at Cambridge University, and earned an MBA from the University of Texas at Austin. She is a recipient of the annual CTA TechHome Leadership Award, and a CEDIA Fellows honoree. A washed-up Ultimate Frisbee player, Julie currently resides in San Antonio, Texas and sometimes St. Paul, Minn. Follow on Twitter:

@juliejacobson

View [Julie Jacobson](#)'s complete profile

PREVIOUS ARTICLE

ARTICLE TOPICS

[CEDIA Expo](#) · [Control](#) · [Whole-House Systems](#)

ARTICLE TAGS

[Google](#) · [Nest](#) · [Thread](#) · [Weave](#)

SHARE



NEXT ARTICLE



Article

BUSINESS SUPPORT

DISTRIBUTORS/REPS

NEWS

OPERATIONS

Article

SPEAKE

ADDITIONAL PREVIOUS ARTICLE

ADI & Snap One Open Omaha, Neb., Hybrid Location

The modernized space 'combines a retail storefront with a state-of-the-art warehouse, stocked with products across all key categories,' according to ADI and Snap One.

KEF : NEXT ARTICLE

Film

Augmen
KEF proc
company

SHOW NEWSLETTER

CEDIA[®] EXPO NEWSLETTER

SIGN UP

CE Pro



CEPro

NEWSLETTER

SUBSCRIBE

SIGN UP

PREVIOUS ARTICLE

NEXT ARTICLE



Content Types

News
Products
Projects
Companies
Downloads
Webcasts
Podcasts
Events

Specials

CEDIA EXPO
CE Pro 100
CE Pro Summit
Awards Programs

Company Info

About
Contact Us
Customer Service
Advertise with Us

Subscribe

Magazine
Newsletters
Digital Edition

Connect

X
Facebook
Instagram
LinkedIn
YouTube
RSS Feed

Categories

AUDIO/VIDEO
AV Accessories
AV Racks
Amplifiers/Receivers
Cabling
Displays
Furniture
Mounts/Lifts

CONTROL
Central Vac
Energy/Power
Interfaces/Devices
HVAC/IAQ
Lighting
Motorized Shades
Whole-House Systems

NETWORKING
Cellular
Devices/Equipment
Wireless
Wiring/Installation

Multiroom AV
Projector Screens
Speakers/Subwoofers
Wireless AV

SECURITY

Access Control
Alarms/Sensors
Services/Platforms
Surveillance Cameras

BUSINESS SUPPORT

Associations/Buying
Groups
Distributors/Reps
Operations
Recurring Revenue
Research
Sales/Marketing
Software/Services
Tools/Testers

MARKETS

Builders
Commercial
Design
Europe
Outdoors
Wellness

CEPro

FOLLOW US ON



POWERED BY



© 2024 Emerald X, LLC. All Rights Reserved

[ABOUT](#) [CAREERS](#) [AUTHORIZED SERVICE PROVIDERS](#) [YOUR PRIVACY CHOICES](#)



[TERMS OF USE](#) [PRIVACY POLICY](#)