

## Smart by Bond Ceiling Fan Advantages

User Benefits	Smart by Bond fan	connected fans
uses widely acclaimed Bond Home app	✓	✗
Wi-Fi connection – no hub required	✓	✓
Wi-Fi Alliance compliant (reduces router compatibility issues)	✓	✗
works away from home via Cloud	✓	✓
works even during internet outage	✓	✗
fastest control response time (< 0.05 sec typical)	✓	✗
secure USA-based Cloud	✓	✗
Wi-Fi network or password change without getting on a ladder	✓	✗
support multiple fans on single electrical circuit	✓	✗
on/off motor and light control via Alexa & Google Home	✓	✓
voice control of fan speed, light brightness, and direction	✓	✗
control system support (Control4, Crestron, etc.)	✓	✗
instant customer support via in-app chat	✓	✗
open-source developer community	✓	✗

Brand Benefits	Smart by Bond fan	connected fans
zero maintenance costs – free updates	✓	✗
uses your existing remote controls	✓	✗
per-unit tracking from factory to user's home	✓	✗
review generator (real customers, real reviews)	✓	✗
in-house support designed to reduce brand call volumes	✓	✗
open API prevents vendor lock-in	✓	✗
brand loyalty program	✓	✗
device control screen customization (images, controls, links)	✓	✗

## **Superior Remote Control Technology**

### **Familiar Remote**

Smart by Bond fans use classic RF hand-held remote controls. These are the exact same remote controls that customers have been using for years. Existing stock of replacement remotes may be used with Smart by Bond fans. Customers who prefer to use the remote control rather than smart technology can simply ignore the Smart features, and use the classic remote control. This makes Smart by Bond fans zero risk for the end-user.

Some other Wi-Fi fans require the user to use a new type of remote control, or do not include a remote control at all. This creates an additional barrier to purchase, and an inconsistent user experience.

### **Classic Auto Remote Learning**

Smart by Bond fans use the classic Auto-Learning feature for remote controls. This is sometimes called "learning the frequency". The customer simply shuts off the power to the fan, turns the power back on, and then holds down the Power button for 5 seconds, within 60 seconds of applying power. The fan blinks 3 times and spins on low speed for 10 seconds to indicate that the remote has been learned. This can only be done once per power cycle.

Some other Wi-Fi fans require the user to get on a ladder, open the canopy, and press a "learn" button on the receiver as well as on the remote in order to pair. This is obviously a disaster for usability.

### **Multiple Fans can be used on a Single Circuit**

Contractors often wish to install multiple fans on a single lighting circuit, without individual toggle switches, for cost reasons. This was not possible with earlier auto-learning receivers because all fans would learn the same remote: a situation that was very painful to undo.

With Smart by Bond, the user or installer can tap the "Re-Learn" button in the App to re-learn the remote to a single fan, even if there are many fans on a single electrical circuit. This results in significant parts and labor cost reductions, and reduced customer service issues.

# Industry-Leading User Experience

## Designed to Google & Apple Specifications

The Bond Home app for Android follows Google's Material Design Guidelines, and our iOS app conforms to Apple's Human Interface Guidelines. This means that we use the buttons, sliders, message bars, and other visual elements that users are most used to on their phones, and which Google and Apple designed their phones to work with. This means that the Bond Home app will work on the widest possible range of phones, particularly with a variety of Android phones with different screen sizes. It also makes the Bond Home app easier to maintain, to continue to provide the best possible user interface even as the operating systems are updated and new mobile devices come on the market.

Competing apps often use highly customized controls in their user interfaces. While these can look visually appealing, these customized controls often do not perform as intended on certain brands of mobile devices, do not scale well to different screen sizes, and can be challenging for less adept smartphone users to control by touch. Furthermore, by using custom controls that users are not familiar with, it can be difficult to understand the state of the fan at a glance, and generally make the app more tiring to use.

## Voice Control of All Fan Features

Smart by Bond fans don't just "work with Alexa and Google Home". They are built from the ground up with voice control in mind. Smart by Bond fans support on/off, speed control, light on/off, and light dimming. And on fans with Smart Reverse, the fan direction can even be controlled by asking for "Summer" or "Winter" mode. Furthermore, voice control by numbers ("Set to Speed 3", etc.) is challenging for some users, particularly those with less common accents. Bond supports a wide variety of ways to ask for different fan speeds to ensure that all users can control by voice, not just those with perfect English and experience with voice control.

Competing smart fans often claim Alexa and Google Home support, but then do not provide speed or light dimming control, or when they do, they use a "custom" skill rather than a native "smart home skill" on the voice platforms.

## **Top Wi-Fi Performance**

### **Router Compatibility**

The Smart by Bond Wi-Fi module inside the fan is Wi-Fi Alliance compliant, meaning that there is maximum compatibility between the smart fan and the user's home Wi-Fi network.

Competing smart products often use inferior Wi-Fi chipsets which run into compatibility issues with certain Wi-Fi networks such as: unable to support passwords with special characters, no support for older encryption types such as WEP, dropping off Wi-Fi and needing to be power-cycled.

### **Advanced Wi-Fi Settings**

Smart by Bond fans now support configuration of advanced network settings: Static IP and custom DNS. These settings are required by many professional installers, commercial users, and advanced home automation users. However, these settings are not available on many other Wi-Fi connected ceiling fans.

### **No Reset Needed for Password or Network Name Change**

A common issue with Wi-Fi connected appliances is if the password or Wi-Fi network name (SSID) changes, the appliance needs to be reset by holding a button and/or power cycling to get back into a "setup mode". Smart by Bond solves this issue by automatically detecting that the fan is no longer connected to the Cloud and re-opening the "Bond Config" network while simultaneously continuing attempts to reconnect to the Cloud. The result is that customers never need to get on a ladder to "reset" their Smart by Bond ceiling fans!

### **Simultaneous Cloud and Local Connection**

The Bond Home platform uses patent-pending multi-protocol "Wye" technology that Olibra pioneered in the Bond Bridge product. The Wye tech allows the app to simultaneously communicate with the ceiling fan over the internet as well as directly through the customer's home Wi-Fi network. Furthermore, Wye technology builds a retransmission layer over common industry protocols to improve reliability. The result is a highly reliable connection between the app and fan, that works both away from home, and while home during an internet outage.

Competing technologies are often only Cloud-based, meaning that they do not work in the case of an internet outage. More sophisticated competing products do use both a local and cloud communication, but they do not *simultaneously* use both, and so are prone to higher rates of delays and errors when on Wi-Fi networks with low signal strength.



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## **Bond API**

### **Our API is Open**

The Bond Local API is the language by which the Bond Home app and integrations communicate with Bond Bridge and Smart by Bond products. Every control signal and status update communicated with a Bond-powered product goes through this API. The API is designed to at once be secure but also low-latency and easy to use and extend. The API specification is published on our website (<http://docs-local.appbond.com/>), making the platform as open as possible for 3rd-party developers.

Competing products all have closed APIs, forcing 3rd party integrators to use unreliable reverse-engineered protocols, which cause user experience issues and limit adoption by the pro market.

### **Our API is Simple**

The Bond API has been designed so that all devices of the same type (Ceiling Fan, Fireplace, Garage Door, etc.) can be controlled in exactly the same way, regardless of whether they are connected via a Bond Bridge or are Smart by Bond appliances. Furthermore, the API uses simple JSON/HTTP technology for ease of programming and compatibility with all languages and control systems.

### **Security**

All communications between Smart by Bond appliances and the Cloud are protected by Transport Layer Security with 128-bit AES Encryption. Communications on the local network are typically secured with WPA2 encryption, and protected with a user-specific 64-bit token.

### **3rd-Party Offline Integrations**

The primary use-case of the API is enabling home automation integrators to develop drivers for their preferred control systems. Members of the Bond community are developing drivers for many platforms, including:

- Control4
- RTI
- Crestron Home
- Hubitat
- HomeAssistant
- openHAB

Few players in the market are able to maintain and sustain such a diverse selection of integrations.



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## **Awesome Customer Support**

### **We are standing by**

The Bond Home app is designed with a razor focus on usability and ease-of-setup, so most customers do not need to get in touch with Customer Support. But if a customer does have a question, live Bond Home support is available from 9AM-12PM New York time.

### **Chat in the App**

It is very easy to open up the "Chat" feature in the app, and most users prefer this way of getting in touch. The user can continue to navigate the app while a small chat bubble appears on their smartphone screen, allowing them to easily talk with the agent while navigating the app.

We are able to resolve most customer questions and small issues through in-app chats. Bond customer support is also available by email and by phone, and through the [bondhome.io](http://bondhome.io) website.

### **Great Customer Support drives Great Reviews**

The Bond Bridge has gotten many 4- and 5-star reviews from customers who initially had some issues, but were able to quickly have it resolved after getting in touch with Bond support. Smart Home technology is not simple, and these issues are inevitable, so having fanatical customer support is key to a successful user experience.

### **Bond Knowledge Base**

For users who prefer to research online before contacting support, we have an extensive Knowledge Base with resolutions for common issues, answers to frequently asked questions, and guides to setting up various integrations. We continuously update the Knowledge Base using customer feedback.

### **Bond Forums**

Lastly, highly technical users such as professionals and hobbyists support one another on the Bond Forum ([forum.bondhome.io](http://forum.bondhome.io)). The Forum is an ideal place for users to discuss advanced setups, integrations with control systems, and discuss the Bond API. Olibra engineers actively participate in the Forum providing professional installers, developers, and hobbyist bloggers with the latest API updates and supporting the development of third-party integrations and control system drivers.

Competing appliance products do not come near to having such a healthy developer community and support for professional users.