Frequently Asked Questions

Introduction
First Alert® OneLink® is a line of wirelessly interconnectable alarms designed to meet the needs of contractors that retrofit or remodel existing properties. First Alert® OneLink® offers the same interconnected functionality as hardwired alarms, without the wires. Because there are no wires to pull through existing walls, First Alert® OneLink® offers a very cost effective way to bring existing properties up to code. Using First Alert® OneLink® provides faster job turnaround vs. hardwire retrofitting applications. Up to 4X more jobs completed means increased profits and customer satisfaction.

The product line consists of mostly battery operated alarms making installation fast and easy. A hardwired bridge unit is used to connect existing hardwired alarms to the new First Alert® OneLink® enabled alarms providing a complete system, old and new. With exclusive features like Voice Warning with Location™, Optipath 360 Technology™ and Spread Spectrum Horn Tone, First Alert has the most complete lineup of wireless smoke and CO products:

**Interconnected alarms provide added warning as compared to single alarms.**
Frequently Asked Questions

Question: What is Voice Warning with Location?

Answer: This is an exclusive First Alert® feature that verbally identifies not only the danger detected, i.e. Smoke or Carbon Monoxide, but also indicates the location of the initiating alarm. There are up to 11 pre-programmed locations stored in the alarm’s memory. Included are Basement, Kitchen, Child’s Bedroom, Living Room, Dining Room, Master Bedroom, Family Room, Guest Bedroom, Office, Hallway, Utility Room and No Location. For example when the alarm sounds, if programmed for “Basement”, it will say “Warning, Evacuate, Smoke in Basement” or “Warning, Evacuate, Carbon Monoxide in Basement”. If other First Alert® OneLink® alarms are located throughout the house they will also announce the same warning even though they were programmed with another location. This is a safety feature no one else has. When seconds count in an emergency it provides an audible indication of the possible threatened area and more importantly what area to investigate or avoid.

Question: How do the First Alert® OneLink® alarms communicate with each other?

Answer: The alarms interconnect via reliable and secure radio frequency (RF) communication. They operate on the 915MHz frequency bandwidth and employ 3 channel frequency hopping vs. 433MHz non frequency hopping with the competition. If for some reason one channel is blocked or being used by another device in the home it automatically switches to one of three frequencies increasing the chance that the signal will be received. This “hopping” to the next frequency to complete the signal vs. waiting for the next send cycle saves precious time. Seconds count in an emergency as a home fire doubles in size every 30 seconds.

Question: How do the First Alert® OneLink® alarms link with each other?

Answer: The linking is automatic through the software with 65,000 security code combinations. This eliminates manual dip switch programming as on the competitive product with only 255 combinations. This saves confusion, time and money on
**Interconnected alarms provide added warning as compared to single alarms.**

**Installation.** With First Alert® OneLink® there is an extremely small chance of a duplicate code programmed in an adjacent apartment’s units as with the competition. No trying to remember dip switch locations for each apartment’s units. Easier programming means a more cost effective installation.

**Question:** What is a “Mesh Network” and how does it work?

**Answer:** First Alert® OneLink® alarms operate on a “mesh network”. All of the First Alert® OneLink® alarms send, receive and resend the initiating alarm’s signal. The competition only sends and receives or is a one-way communication. It does not resend. Why is this important? In the following illustration, the initiating alarm is in the basement. Let’s say the signal is blocked from reaching the Master Bedroom alarm either by distance or some obstruction in the home. With First Alert® OneLink®, the mesh network of alarms re-routes and resends the signal via the other alarms, providing a greater chance all alarms will receive the signal. With the competition, only the initiating alarm is sending a signal. Therefore, the Master Bedroom never receives a signal and is deadly silent. The “mesh network” is a more reliable means of wireless communication. Again, seconds count in an emergency.

**Mesh Network Illustration**

---

**Mesh Network Communication**

**Competitive Wireless One-Way Communication**

---

**Interconnected alarms provide added warning as compared to single alarms.**
Frequently Asked Questions

**Question:** How do I program and link the alarms?

**Answer:**

**TO PROGRAM FIRST ALARM:**
1. Insert batteries (2, AA batteries).
   Alarm Will Say: “Welcome, First Alert Smoke Alarm.” “No location programmed” if first time or “[Location, example: “Basement”] location programmed” when changing batteries. “To select location, press and hold test button now.”
2. Press & Hold Test Button if you would like to program the location or change the location of the Alarm. Release button after Alarm responds. Alarm Will Say: “To save location, press and hold test button after location is heard.” Alarm will speak list of locations.
3. After you hear the location of where you are placing the Alarm, Press & Hold the Test Button. Alarm Will Say: “[Location, example: “Basement”] location saved.” If no location is chosen: “No location saved.” Your Alarm has now been programmed for the location of your choice.

**ADDING AND LINKING ADDITIONAL ONELINK® ALARMS**

NOTE: Steps 1 through 3 below need to be completed within two minutes. If more than two minutes pass, the Green power LED will stop blinking. Simply open the battery drawer of the second Alarm and repeat steps 1 through 3.
1. Insert the batteries into the battery drawer of the next Alarm. DO NOT CLOSE THE DRAWER.
2. Press and hold the test button and then close the battery drawer.
3. Once you hear the unit chirp, release the test button. The Green power LED will start to blink indicating the ONELINK® Alarm is waiting for program data from one of the other existing setup ONELINK® Alarms.
4. Press and hold the test button on the first Alarm, until the second Alarm chirps and its Green power LED stops blinking. Then release the test button.
5. You will now be prompted to set the Alarm's location. Follow the directions given by the Alarm.
6. Repeat steps 1-6 for additional ONELINK® Alarms.

You have now successfully linked your new ONELINK® Alarms. To add additional Alarms at a later time, follow steps 1 through 6.
**Interconnected alarms provide added warning as compared to single alarms.**

Frequently Asked Questions

**Question:** What is the Spread Spectrum Horn Tone?

**Answer:** The Spread Spectrum Horn Tone is a lower and varying horn frequency that sweeps through the 2200 - 3400 Hz range. As we age we lose the capability of hearing higher frequencies. This lower frequency and sweeping tone make it easier for the elderly with normal age related hearing loss to better hear the horn as compared to a standard horn. This is an important feature to discuss with customers as the overall population is getting older as the Baby Boomer’s population segment moves into their 50’s, 60’s and 70’s. The first US Baby Boomers will turn 65 in 2011. (The baby boom refers to people born in the post-World War II period from 1946 through 1964). This market potential is already being targeted by builders as evidenced by the increase in the development of more “Over 55” communities. American’s 55 and older will head 40% of the nation’s households by 2012. No other alarm manufacturer has recognized this potential and has this feature to date.

**Question:** How can First Alert® OneLink® alarms be relevant for contractors who have existing home additions projects?

**Answer:** When dealing with new construction for existing home additions, the First Alert® OneLink® “Bridge” unit (SA520B) is a perfect solution. It is often difficult to connect to the existing alarm circuit when dealing with home additions. Concrete, steel, laminated beams, etc. are blocking easy access. Building codes state that the alarms must be hardwired for power, but do not have to be hardwired for interconnect. Therefore, the SA520B can be used in the new addition, where power can be obtained locally from a lighting or outlet circuit. In the existing part of the home, just replace one of the existing hardwired units with the SA520. Link the two alarms to “bridge” the old and the new sections.
Frequently Asked Questions

Now all alarms will be interconnected, including other existing hardwired alarms that were interconnected in the old section. First Alert® OneLink® smoke alarms will interconnect with most competitive smoke alarms, so retrofitting will not require replacement of existing competitive alarms. (Note: this is not true for competitive carbon monoxide alarms). In the new section, additional 9120B’s can be used and in the old section, other First Alert® OneLink® battery operated alarms can be used to bring the bedrooms, hallways, etc. up to code. First Alert® OneLink® alarms are a cost effective solution to renovation and remodeling.

Question: How can Property Owners and Facility Managers benefit from installing First Alert® OneLink® alarms?

Answer: Property Owners and Facility Managers of existing buildings can save an average of $150 - $200 per alarm on installation when compared to hardwired alarms, when they do not have pay for the retrofitting costs of time, material and labor to connect to an existing alarm circuit and incur drywall repairs, painting, etc. This does not account for special cases requiring conduit (in some parts of the country), wire mold, concrete drilling, etc. Turnaround time is much faster. Case in point, Penn State University in State College, PA accepted First Alert® OneLink® alarms as a viable alternative to hardwiring alarms in existing off-campus housing. Code officials are recognizing the benefits of First Alert® OneLink® alarms.

Question: How can Electrical Contractors benefit from installing First Alert® OneLink® alarms?

Answer: Electrical Contractors can benefit from installing First Alert® OneLink® alarms when they have remodeling projects. When new construction is down, Electrical Contractors are looking for jobs to maintain sales and keep their crews busy. Using First Alert® OneLink® alarms provides a solution for a faster job turnaround and cleaner installation - 4X more or greater than retrofitting with hardwired alarms. Their customers are happier because of the speed the job is completed and they do not have to hire drywall installers and painters after they are gone. The point is that even a contractor that makes his living primarily on electrical installations can benefit from installing battery operated alarms.
Frequently Asked Questions

Question: What are the latching features on the First Alert® OneLink® alarms?

Answer: There are two latching features on these alarms: Alarm Latch and Low Battery Latch. The latching features are an easy way to see what unit initiated an alarm or what unit is in low battery condition. Alarm Latch is activated after an Alarm is exposed to alarm levels of smoke or CO. After smoke or CO levels drop below alarm levels, the Red LED will begin to flash On for 2 seconds/Off for 2 seconds. It will continue to flash or “latch” for about 15 minutes, to give time to determine which unit initiated the alarm. Low Battery Latch is activated when the Alarm is in the “low battery condition”. When this occurs, the Power LED flashes Green On for 2 seconds/Off for 2 seconds for about 15 minutes. This feature is designed to help you identify which Alarm needs to have the battery replaced. Although, the alarm will sound the low battery chirp approximately once every minute, sometimes during the initial stages of “low battery”, the alarm will chirp in greater intervals than once per minute, sometimes up to several hours, until the battery reaches a steady low battery level. This innovative feature eliminates the frustration of waiting for and/or identifying which unit is chirping.

Question: What is Optipath 360 Technology™?

Answer: Optipath 360 Technology™ is an exclusive patented feature that provides 360° of direct access to the smoke chamber. The Photoelectric sensor actually is mounted on the bottom of the circuit board so that when the alarm is installed the sensor points towards the ceiling. The sensor has virtually an unobstructed path to smoke that enters through the slots on the bottom of the alarm.

Question: Are First Alert® OneLink® alarms listed to ANSI/UL Standards?

Answer: Yes. All First Alert® OneLink® alarms are listed by ETL, an accredited NRTL (nationally recognized testing lab) to ANSI/UL 217 Standard for smoke alarms and ANSI/UL 2034 Standard for carbon monoxide alarms.

**Interconnected alarms provide added warning as compared to single alarms.
Frequently Asked Questions

Question: How many First Alert® OneLink® alarms can be interconnected together?

Answer: As with hardwired units, NFPA states that up to 18 total units can be interconnected (RF or hardwired) with a maximum of 12 of those being smoke alarms.

Question: How long will the batteries last on First Alert® OneLink® alarms?

Answer: As required by the ANSI/UL standards, a battery operated alarm must have the batteries last for at least one year. First Alert® OneLink® battery operated alarms meet these requirements.

Question: What other features do the First Alert® OneLink® alarms have?

Answer: First Alert® OneLink® alarms other key features include:

- A photoelectric smoke sensor. The competition uses ionization sensors. Photoelectric sensor technology is nuisance resistant around kitchens and bathrooms, which traditionally are more prone to nuisance alarms from cooking smoke and steam from showers. Nuisance issues with tenants is time consuming and costly. Some areas of the country require photoelectric alarms near high nuisance areas like kitchens and bathrooms.

- Requires only 2 “AA” batteries vs. 3 AA batteries with the competition. This saves 33% in annual battery replacement costs. For large apartment complexes, this can add up to thousands in savings per year.

- Two Silence features: Alarm Silence can quiet nuisance alarms for several minutes. Low Battery Silence can temporarily silence the low battery chirp for up to eight hours before replacing the battery. This is a key feature when the low battery chirp begins in the middle of the night and you do not have any replacement batteries. You can quiet the chirp and then replace the batteries when it’s more convenient.

- Perfect Mount mounting bracket allows for adjustments to the alarm orientation without it disconnecting from the mounting bracket. This allows for a cleaner installation.

- Tamper resistant pins to lock the battery drawer and alarm to mounting bracket. This is a requirement in many multi-family installations.
Frequently Asked Questions

- Pull out battery drawer makes it easier to replace the batteries. No need to remove from wall or ceiling. The competition’s battery access on the back of the unit.
- The SA520B hardwired alarm has the same contractor preferred features like a AC power quick connector, large opening in mounting bracket for easy access to wiring, keyhole slots in the bracket to eliminate the need to completely remove the electrical box screws to install the bracket and a universal bracket that fits any standard electrical box up to 4” in size.
- All smoke alarms have a 10-year limited warranty and CO’s or Smoke/CO combos have a 5-year limited warranty.

First Alert® OneLink® Competitive Comparison Summary

<table>
<thead>
<tr>
<th>Feature</th>
<th>First Alert® OneLink®</th>
<th>Competitive Wireless</th>
</tr>
</thead>
<tbody>
<tr>
<td>SKU Lineup</td>
<td>Smoke and CO alarms (4 SKUS)</td>
<td>Smoke alarms only (2 SKUS)</td>
</tr>
<tr>
<td>Smoke-Sensing Technology</td>
<td>Photoelectric</td>
<td>Ionization</td>
</tr>
<tr>
<td>Patented Optipath 360™ Smoke Technology</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Electrochemical CO Sensor</td>
<td>Yes</td>
<td>No CO Alarm</td>
</tr>
<tr>
<td>Pullout Battery Drawer</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Voice With Programmable Location</td>
<td>Yes (First Alert Exclusive)</td>
<td>No Voice</td>
</tr>
<tr>
<td>CO Peak-Level Memory Recall</td>
<td>Yes</td>
<td>No CO Alarm</td>
</tr>
<tr>
<td>Battery</td>
<td>2 AA batteries</td>
<td>9V and 3 AA batteries</td>
</tr>
<tr>
<td>Unique House Code</td>
<td>Automatic Software-programmed 65,000 unique codes</td>
<td>255-location 8 position dip switch (manual)</td>
</tr>
<tr>
<td>Frequency</td>
<td>915MHz with 3-channel frequency hopping</td>
<td>433 MHz w/o frequency hopping</td>
</tr>
<tr>
<td>Silence Feature</td>
<td>Nuisance and low battery silence for up to 8 hours</td>
<td>Nuisance only</td>
</tr>
<tr>
<td>Mesh Network</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>