

Monitored Association Alarm Systems may fail to bring help when needed!

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Does your community have monitored fire or burglar alarm systems? Do they still communicate with monitoring stations? Always? Are you certain?

Many associations are discovering their alarm panels no longer communicate with monitoring stations because communications technology has changed (sometimes without notice) and the alarm's "communications link" has not been updated nor redundancy added. Some managers may receive calls from residents about constant beeping keypads without understanding why.

If your community's alarm system uses 3G cellular or "unmanaged VoIP" telephone service, these systems may not be communicating correctly and will fail to call for help when needed.

It's not complicated – the 3G cellular system has been shut down and RF frequencies reassigned to 5G/4G-LTE networks. Unmanaged VoIP services may work for voice calls, but the delicate requirements necessary for alarms to properly transmit their alarm signals reliably may not play well with 3rd party carriers.

Telephone service used to be a no-brainer. Long gone are the days of lifting a handset and hearing that reliable analog dial tone sound, letting your voice sing out thru copper wires that run out of your house, onto telephone poles up and down the street. That was POTS — Plain Old Telephone Service. And slowly, but persistently, POTS is disappearing.

Phone companies contend that the wiring used for POTS is expensive to maintain and are raising prices in an effort to push customers away from POTS. Many are charging customers over \$150 a month for each line of POTS phone service. New construction projects are even being built without including POTS lines to the property.

The final death knell for POTS arrived in 2019, when the FCC issued Order 19-72A1, mandating properties to have POTS lines replaced by alternative services (Coax, Fiber, etc.) to provide other services. "We find that the public interest is no longer served by maintaining these legacy regulatory obligations and their associated costs," the commission wrote.

Major providers have begun decommissioning their POTS networks, switching landline customers to "Managed" VoIP service, often without their knowledge. VoIP sends a signal across a property's internet lines, leaving POTS wires dormant.

Phasing out POTS has led to widespread confusion when it comes to alarm system communications. Property owners and businesses have received little guidance on how their systems need to be revamped to keep them safe and in compliance with their insurance policies. Many Fire Alarm sales consultants see this as an opportunity and may try to push consumers into buying updated alarm panels, even replacing them without required permits, when only the communication systems need to be modernized.

Historically, alarm systems have been configured around one or two dedicated POTS lines to assure uninterrupted coverage. Having two (2) paths for communication is especially important for Fire Alarms. Insurance providers with alarm conditions in their contracts expect properties to have continuous monitored alarm coverage. A delay of even 90 seconds could be enough for a fire reconstructionist to lay the blame for damages at the feet of businesses or HOAs.

It is vital that every system has a solid redundant communication path to the central station. A trusted and certified technician can make the difference.

VoIP lines can be unreliable when used for alarms. Anyone with high-speed internet can attest to the frustrations of random outages. Unlike POTS services, VoIP sends its signals as packets of data which adds latency. If packets get lost, or sent incorrectly, the disruption could keep alarm systems from sending critical data to the monitoring system as expected.

On-site modems are dependent on electricity to function, unlike POTS. If a property is relying on VoIP and loses power, it may also lose phone service. "Managed" VoIP services alone won't be a solution to sustain consistent alarm coverage.

Given the switch to VoIP, many alarm vendors are now offering "Sole Path" radios that depend on single cellular radios. But like VoIP, these radios can also be unreliable, with possible delays caused by periodic traffic overload or weather conditions. Cell sites are taken offline for servicing and often late at night or early mornings. There have even been widespread cellular outages on rare occasions when cellular providers experienced connectivity loss at one or more sites.

Sole path radio conversions are simply not a reliable alternative for Fire/Life Safety.

Any improperly monitored alarm system opens businesses or HOAs to possible liability, including refusal of an insurance claim. In the case of the owners of Mama K's Diner, a restaurant in Visalia, Calif., their attempt to recover damages after a fire was thwarted due to the inadequacy of their alarm system. The system was sold with a keypad button to be pushed manually in the case of fire. As such, AMCO Insurance Company did not consider this to be an adequate Fire Alarm, designed to protect the building and contents.

Mama K's sued for breach of contract but lost. According to the court, it wasn't the insurance company's job to tell the business what specifications would satisfy their Fire Alarm conditions. The business was left hanging.

Building redundancies into any Fire or Security alarm system is key to meet the requirements of the alarm system manufacturer's expectations. Owners may want to consider using one "Managed" VOIP phone line alongside an additional Cellular Radio. This is known as "Dual Path". As long as services are kept up to date and in good working order, this should ensure transmission of their alarm signals to the Central Station.

Owners should verify the insurance company agrees with any redundancy reduction, so they don't end up like Mama K's. Switching away from a POTS or dual path design could constitute an unpermitted change that voids policies. The onus is on businesses and HOA's to ensure systems comply with their insurance policies — this includes reliable communications!

An even better solution is to use a 4G/5G cellular radio backed up by a wired internet connection to establish a redundant communications solution for one path and use a "Managed VoIP" service for the other. This radio equipment includes a backup battery for power outage concerns. Switching even one path from POTS to a combination internet and voice service can save associations money and improve alarm system monitoring reliability as POTS leaves.

Alarm system cellular communicators today must be at least LTE capable, as earlier 2G & 3G radios no longer work. Property managers should regularly check their fire systems for messages displayed on keypads or panel sounders emitting. The displays should only have a green power light (NO Yellow or Red lights), and/or state "Ready" or "System Normal" with no other messages.

As the telephone industry tries to rid themselves of the expense of their dependable legacy POTS system, it opens up opportunities for errors. It ultimately comes down to the manager to do their homework. Always do business with a licensed and experienced Fire Alarm Vendor, so when the system rings for help, the call is received.