

# Don't lose your security with VoIP

Check with your security professional before signing up for VoIP Service

Voice over Internet Protocol (VoIP) is a wonderful new technology that can save consumer money by sending phone call over the same broadband DSL or cable modem lines they use for their Internet connections. This means potential savings in long distance rates over standard telephone lines because Internet connections have no additional charges for long distance.

**Consumers who have monitored alarm systems must be sure to check with their professional security dealers before installing VoIP telephone service.**

But consumers who have monitored alarm systems must be sure to check with their professional security dealers before installing VoIP. Because most alarm systems communicate over standard telephone lines, new VoIP service must be compatible with the system used by the company that monitors a home's burglar and fire alarms.

If it is incompatible, a fire or burglar alarm signal may not be received by the central station monitoring a home, or the signal may be received in a confused or incompatible fashion. Some VoIP systems do not work in power failures or

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## What's in a touch-tone?

Each tone is two musical notes. The amount of time elapsing between each tone can be crucial for an automatic monitoring system to successfully interpret a signal.

When a fire or burglar alarm is received from a home or business, the alarm panel sends a complex touch-tone signal to the central station. That automatically notifies the central station that an alarm has been received and tells it what kind of alarm it is.

This enables an operator at the central station to be notified of the alarm within seconds and automatically be given a list of options by the computer, such as contacting the police, fire department or the homeowner or business owner at one of several potential phone numbers.

If any step of this process is impeded by poor reception of the automatic system's touch-tone signal, the alarm may not be handled properly.

Because VoIP is a digital process, it breaks sound into digital packets like the ones that contain information sent over the Internet. If those packets are not reassembled exactly the way

**Check with your professional security dealer or systems integrator for information about the most reliable way to convert your fire and/or burglar alarm system to VoIP.**

have limited backup battery capacity which is when a burglar or fire alarm may be needed most. This does not happen with standard telephone lines because they carry their own electric power.

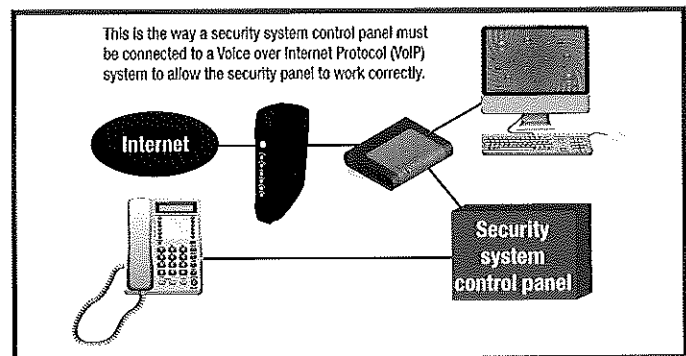
Internet line sometimes are shut down for maintenance. For surfing the Web or even telephone calls, this may be a temporary inconvenience. But for an alarm systems that must be connected 24/7 it can literally mean the difference between life and death. Sometimes just the act of disconnecting an alarm itself sets off an alarm and if your municipality fines you for false alarm this can be an expensive event.

No standard currently exists in equipment used for VoIP systems so your professional security dealer or security system integrator should be contacted for advice about which VoIP systems in your area work best with his or her company's monitoring services.

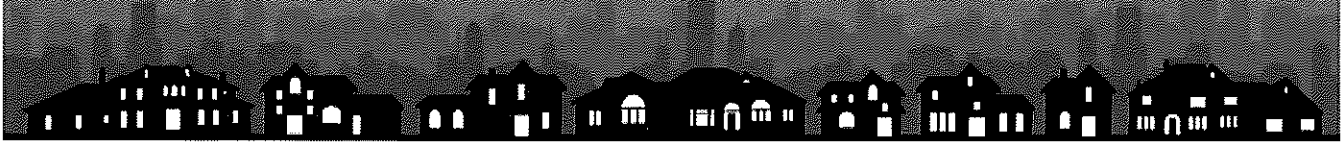
Another advantage of VoIP for commercial telephone customer is its ability to provide phone numbers located outside a customer's area code. This can allow a business to have local phone numbers in other states for their customers to call that are answered long-distance at the business' home office.

they were received, the automated equipment receiving the signal may miss it. Some digital compression formats used by VoIP providers do not reproduce the signals accurately.

If the touch-tones are run too close together or too far apart, or if their pitch is not reproduced accurately, the signal may not be received. Even if signals are received in tests, they may not be received all the time. But for true security, fire and alarm signals must be received perfectly every time.



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### **VoIP and home security monitoring. (Updated May/09):**

**It is ironic that many consumers switch their telephone service from a traditional land line to VOIP service to save money, then discover after the fact that their alarm system is not compatible with VOIP. This requires them to keep their regular phone line, or use cellular and/or radio for alarm transmissions. This, of course, can offset or eliminate any savings that they may have enjoyed using VOIP in the first place.**

#### **So what is VoIP, And How Can It Interfere With My Alarm System's Monitoring Capabilities?**

**VOIP** is an acronym for Voice Over Internet Protocol. It simply uses your broadband internet connection to place voice calls digitally over IP based networks. Generally, a consumer will pay a flat monthly fee for local and long distance calls, often for considerably less than a regular analog land line.

#### **Using VOIP And Alarm Systems Can Pose Problems Because:**

**1. An alarm system is designed to send its signals over an analog phone line. To transmit emergency signals properly using VOIP, the signal must be converted to digital, then converted again to analog. It is during this conversion that problems develop. Usually the signals arrive at the central monitoring station with errors, or not at all.**

**2. Your alarm panel comes equipped with a back up power supply in the event of a power failure. Because traditional phone lines will still work even if your power is out, your monitoring station will still receive the proper signals. With VOIP, your phone service (specifically your IP router and/or modem) will not operate during a power failure, preventing any kind of signal transmission from your alarm to the monitoring station. You can prevent this with the purchase of a UPS (Un-interruptable Power Supply) for your PC.**

**3. VOIP services tend to be more prone to "mysterious" technical issues and dropped calls. Your alarm panel may be communicating vital data to your monitoring station, and a dropped call will obviously interfere with this. Or, your alarm's signal may go through without a problem on one attempt, but will fail on another for no apparent reason.**

**4. Similar to a land line, your VOIP line (specifically your cable connection) can be cut or disabled by a potential intruder, severing your link to the monitoring station.**

