Voice over Internet Protocol (VoIP)
New Way to Communicate – New Problems For Security Systems

VoIP is a new internet or cable phone service option available primarily to cable subscribers. VoIP allows phone calls to be made over an internet connection instead of through the traditional Plain Old Telephone Service (POTS). VoIP offers unlimited local, regional and long-distance calling within the US and Canada along with popular calling features, at an attractively low monthly rate when compared to traditional phone service. However, at this time VoIP is not fully regulated by the Federal Communications Commission (FCC), because it is viewed as a service option, not a primary means of phone communication. Consequently, while there are standards being created to promote uniformity, there is nothing mandating that all VoIP service providers abide by these standards. The process of transmitting voice as digitized data used in VoIP has created an unreliable means of communication between security systems and monitoring centers. Many VoIP suppliers actually specify in their literature and web pages that alarm systems should not be connected to VoIP. They encourage customers to keep one POTS line available for emergencies, such as 9-1-1, which also does not always work through VoIP. The following information provides an overview of the problems associated with VoIP internet and cable phone service, available partial solutions and what the future holds.

Why VoIP Will Not Allow Alarm Signals to Reach the Monitoring Company

- The VoIP adapter is not wired to the phone jack correctly.
- The VoIP adapter is wired correctly but signals will still not go through for various reasons, such as the alarm user is accessing other Internet services at the time an alarm goes off.
- The VoIP service cannot accurately reproduce the sounds from the alarm communicator over the internet or cable service.
- Even when internet or cable phone service is working fine, alarm signals may cease to transmit properly.
- VoIP providers use different internet communication methods, depending on cost savings, to carry their internet and cable phone service. The customer will not be aware of any change until the alarm system is no longer able to transmit signals.
- The VoIP service will most likely not allow the alarm company to remotely download changes to the alarm control panel. This will result in the alarm user having to pay for a technician to service the system.
- POTS systems are required to have their own power supply and will usually work in a power outage. VoIP is not required to have a backup power supply and may not reliably work during a power outage.

Because internet and cable phone service technology changes so fast, alarm users MUST regularly test the ability of their alarm system to transmit signals, per their alarm company instructions. If you are unsure how to properly test your alarm system, call your alarm company for instructions!

Alternatives to Help Ensure Open Communication Lines

- Keep at least one POTS line and connect your alarm system communication to it.
- Buy a backup communicator such as a long-range radio, cellular line, or IP alarm transmitter.
- Backup communication transmission methods must be paid for separately and could increase the monthly monitoring rate as well.

The Future of VoIP

VOIP is here to stay. It is estimated that there will be a 1,700% increase in VoIP households by 2010. Although some companies have written very good standards and specifications, which other companies have adopted, currently there are no federally mandated comprehensive standards. It seems that in the immediate future, standards will be regional in nature so that alarm system communications over internet or cable phone service will work in one area and not in another without significant changes. The alarm industry is working diligently with other organizations to find solutions.

Learn More

Visit the websites of the following organizations involved in the issue of VoIP internet and cable phone service and alarm system compatibility for their latest information:

AICC: http://www.csaaul.org/AICCCommittee.htm
CableLabs: http://www.cablelabs.com
MBFAA: http://www.mbfaa.com
NBFAA: http://www.alarm.org
NCTA: http://www.ncta.com
NENA: http://www.nena.org
SIA: http://www.siaonline.org/index_sia.asp