

## VoIP and Security

Many businesses and homeowners today are attracted to “Voice over Internet Protocol” or VoIP services from local Internet providers and cable companies. VoIP offers significant cost savings on local and informational calls as well as streamlining service providers by utilizing one vendor for both networking and telecommunications. However users are unaware of the security issues and vulnerabilities of VoIP systems in relation to security alarms and emergency services provided by some local Internet providers and cable companies.

Some of the problems that alarm companies have encountered from VoIP services are:

1. Many **existing digital communicator alarm control panel formats are not compatible** with a least some VoIP services and not be reliably transmitted to the central station.
2. VoIP providers cut subscriber connections to the telephone network and replace them with connections via the cable company to the Internet to the in-house system behind the RJ31X jack. This results in the system being incorrectly configured, because the **RJ31X becomes wired incorrectly**, and the panel is disconnected in the alarm state, unable to send signals to the central station.
3. VoIP providers have totally **disconnected the in-house wiring and installed short-range wireless phones connected to the VoIP device**. The alarm panel is then totally disconnected from the telephone network and rendered useless.
4. The Bell Companies, AT&T, MCI, Sprint and other **large local and long distance telephone companies may route portions of calls through VoIP facilities**, and alarm data may be lost or distorted during these VoIP segments of calls.
5. Some alarm **customers have changed their telephone service from a local exchange carrier to a VoIP provider without notifying their alarm company** and without realizing that their alarm system may no longer work.
6. **VoIP systems are vulnerable to power outages** unless customers have adequate battery or other auxiliary power. Unlike traditional telephone service, they are powered from the customer premises rather than from the telephone central office.