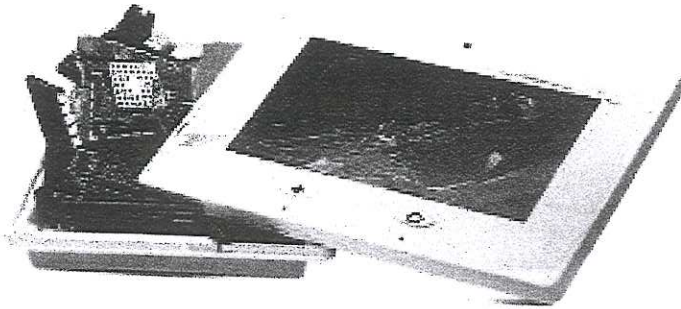
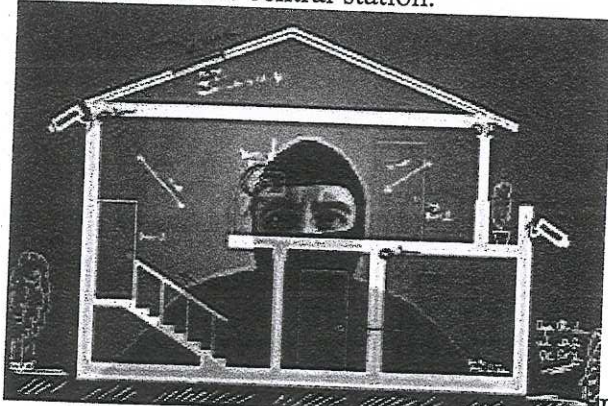


Understanding Honeywell Advanced Protection Logic (APL)



APL or Advanced Protection Logic was introduced with LYNX Touch as a way to combat “smashing” the control keypad before an intrusion alarm can be sent to a central station.

Traditional hardwired systems such as the Honeywell Vista-20P, have a control panel which contains the intelligence of the security system, hidden somewhere out of sight, usually in a closet or basement. The location is picked by ease of wiring (all hardwired sensors have to run back to the control panel), as well as security. How long would it take an intruder to find and disable the control panel? Smashing the keypad of a hardwired system will not disable the security system nor prevent an alarm signal being transmitted to the central station.



However with an all-in-one system the control panel is more visible to an intruder since it's generally mounted to a wall in a central location of the home making it easy for family members to interact the system. This makes most all-in-systems extremely vulnerable to an intruder disabling the system before a siren even activates, and certainly before any alarm signal can be transmitted. Advanced Protection Logic (APL) however eliminates this risk because a pre-alarm signal is sent as soon as the entry delay (door opening) begins. A second signal, pre-alarm cancel, is sent when the security system is disarmed which indicates to the central

station everything is OK – if received within say 60 seconds of the initial pre-alarm signal. If the panel is “smashed” before it can send the second pre-alarm cancel signal, then the central station will assume there is a valid burglary in process and take appropriate response.

The Honeywell Lyric and Honeywell LYNX Touch all-in-panels have APL built-in. While APL itself will not prevent a break-in or your system potentially being destroyed, it can ensure notification to your local police of a robbery in progress and hopefully limit any loss since intruders won't have hours to spend in your home. Of course having central station monitoring is critical since without it the panel smash risk has not been removed! Landline connection to a central station is fine for normal alarm signalling, but is not APL supported and requires a backup communication path such as Internet or cellular. Only the Honeywell LYNX Touch L5210 still supports landline communication. Also Self-Monitoring which could include Honeywell AlarmNet with Total Connect 2.0 for remote arming/disarm and Z-Wave control for example, will not however remove the panel smash risk. APL was designed for central station dispatch use.



To summarize, APL is used to eliminate panel smash risk and is only supported on the following panels using interactive service (Honeywell AlarmNet) and UL Central Station monitoring:

- Honeywell LYNX Touch L5120
- Honeywell LYNX Touch L7000
- Honeywell Lyric LCP500

While traditional security systems house the main "brains" of the system (the control panel) in a metal alarm cabinet which is usually installed in a basement, laundry room, utility closet, etc) and then utilize keypads, sensors, communicators and other devices that all wire back to the control panel, newer all-in-one type security systems (like the LYNX Touch and Lyric systems) put all of the components of the system (control panel, keypad, battery backup, alarm communicator, siren, wireless receiver) into one self contained unit that mounts to the wall. All-in-one systems are very popular these days because they are much easier to install and tend to offer more of today's new security features (remote system control, touchscreen display, Z-Wave integration, IP and/or cellular communications, etc) at a lower cost compared to a more modular traditional system. However, as the control panel (and alarm communicator) is located by the main entry to the home with the all-in-one design, there is a security risk that an intruder could break-in through a delay door (a protected door that has a delay so that the valid alarm users can enter the property without setting off an alarm) and destroy the entire unit before an actual alarm is triggered. Without APL logic, this would be a huge flaw in the system design and for good security, the all-in-one system would need to be installed in a remote location which would be less user friendly.

Fortunately, Honeywell built the APL logic into their servers so that if a break-in of the type described above happens, an alarm is still transmitted to the central station. The way that APL works is that a "door open" signal is sent to the Honeywell/AlarmNet servers as soon as the delay door is open. As the door may be opened by a valid user coming home or an intruder, the servers don't act on that signal and simply hold it while waiting for a period of time that equals the programmed entry delay period plus any programmed dialer delays (Alarm Grid encourages no dialer delays for maximum security) plus an additional 75 second APL delay (to account for signaling transmission times). If at the end of that full wait period, no alarm or disarm signal was received, logically the panel must have been destroyed and therefore, the servers send down the original "door open" signal as a regular door alarm to the central station to be acted upon. If a disarm did occur, the servers ignore the "door open" signal and just transmit the disarm and if an alarm did occur, the servers just send down that actual alarm signal as a regular alarm to the central station.

APL logic won't protect your LYNX Touch or Lyric system from being destroyed during a break in (there's no way to stop an intruder from breaking anything in the home once they've gotten in) but it will make sure that a break-in of this type still generates an alarm so that you and the proper authorities can be notified.