Introduction to PassPoint Systems

PassPoint is a new concept in Access Control Systems, designed and developed by Ademco to provide professional security installers with a comprehensive, and feature rich product, yet extremely cost effective in its installation and set-up, and with an attractive overall cost/door pricing.

PassPoint Communications Network
Designed around Echelon LonWorks™ flexible network technology, an unshielded twisted pair, polarity insensitive circuit with freedom to wire in any direction provides the communications backbone. This new approach to cabling remote field hardware, significantly reduces the cost of installing new systems, allows the retrofit of systems using existing cables and gives PassPoint a unique *plug'n'play* automatic enrollment capability, eliminating the need to set hardware addressing.

PassPoint Hardware Panels
The field hardware is modular and flexible. Designed around a powerful 32-bit processor, the Main Logic Board (MLB), maintains the system configuration, event log and cardholder database. Access points are managed by Door Control Modules (DCM), complete with enough input and output points to support two doors. The MLB communicates to the DCM via the LonWorks network.

The PassPoint system may be expanded by additional DCM's to a maximum of 32 access points or 128 access points, depending on the software configuration used. Extra functionality may be added by connecting PassPoint hardware modules and configuring them using PassPoint software.

PassPoint Express™ Software System
PassPoint is a total Access Control solution, combining a rich set of access control features with an easy-to-use Windows 95™ interface. The PassPoint Express™ software's graphical user interface is used to configure and manually control the system, but is not required to run the system, once the hardware setup is completed.

PassPoint was especially designed for easy implementation – using intuitive interfaces, Wizards, for setting up, controlling and configuring the PassPoint Access Control system. PassPoint Wizards take the user one step at a time through complex operations such as system setup and cardholder database. PassPoint also comes with pre-packaged, pre-defined system templates (Access Levels and Time Schedules) for quick system setup, and allows security installers to create their own system templates for fast on-site configuration.

> **Off Line Mode**
> The system, once configured by using the PassPoint Express™ software, can be fully operated in an off-line mode. The system would subsequently only need to be brought on-line for future card enrollment and other configuration changes as the need arises.
> **On-Line Mode**
> The PassPoint Express™ software can be used in an on-line mode, which provides the capability of controlling the system resources in real-time, as well as monitoring events in the system as they occur.

In short, the PassPoint Express™ software provides a simple, yet powerful way of configuring and controlling your PassPoint Access Control system.

PassPoint Kits
Ademco has also simplified the process of ordering and configuring a PassPoint System. Currently, PassPoint has several pre-packaged Kits that contain almost all the equipment needed to install and commission an Access Control System.

- **Access Starter Kit (ASK)** - all hardware (MLB, DCM, CANPOWER), Win95 software (PassPoint Express™), 2 Prox readers, 50 Prox cards for a two reader system. Simply supply locks and wire.

- **Basic Starter Kit (BSK)** - as the ASK except that the readers and cards are not included, allowing the security designer flexibility and choice of reader technology e.g. magnetic stripe, biometric, keypad devices, in fact any industry standard reader can be used with the BSK.
- **Door Expansion Kit (DEK)** - is a DCM with System Enclosure and Power Supply (CANPOWER) to allow the expansion of a system to the next two doors (i.e. access points).

The ASK and BSK come conveniently packaged in an attractive cardboard box, and all electronic boards are pre-mounted in the System Enclosure.

- **Intelligent Power Supply**
  Power cables required to connect the power supply output to the boards are included in the Kit. The power supply is sufficient to power two boards (MLB and DCM), two readers (5V or 12 volt, 250mA total combined current for both readers) and two locks (12v, 450mA each).

Configuring and Designing PassPoint

PassPoint Express™ systems are initially configured by using a Starter Kit (choose a ASK or BSK) and are capable of supporting up to 32 doors. System expansion is accomplished by using Door Expansion Kits (DEK), all connected to the rest of the system via LonWorks™ unshielded twisted-pair networking technology. The PassPoint network has flexible wiring rules, so that designs using the most direct access routes, and retrofits using existing cabling, make installation simple and cost effective.

Complex configurations can be designed and configured by using additional, separate PassPoint input (ZIM) and output (QRM) modules, a Vista fire/burglary panel gateway (VGM), and a unique desktop card enrollment kit (CEK). To simplify the building of systems PassPoint also offers a metal systems enclosure with the distributed power supply (CANPOWER).

Specifications

- 32 Doors or access points, expandable to 128
- 2,000 Cardholders, expandable to 8,000
- 7,000 Event Log, expandable to 30,000
- 128 Access Groups (Levels), 5 per cardholder
- 64 Time Schedules, with 8 intervals per day
- 33 Form C relay output points
- 32 Trigger outputs
- 66 Alarm Zone Input points

Features
- 32 Bit software compatible with WIN95 and NT Graphical presentation of system architecture control over system resources by point and click
- Full, custom reporting suite
- Real time monitoring of events
- Easy-to-use Wizards for system configuration
- Automatic field hardware enrollment

Minimum PC Requirements
- Intel Pentium PC, 90 MHz or faster
- Windows 95 or Windows NT
- 16 MB RAM
- 20 MB hard drive space available

Listings/Approvals
- UL#294

Summary of PassPoint Systems Hardware Modules and Kits

Kit #	Name	Description
PTBSK	Basic Starter Kit	Starter Kit for two doors
PTASKPROX	Access Starter Kit	Starter Kit for two doors with 2 Prox readers and 50 Prox cards included.
PTDEK	Door Expansion Kit	Expansion Kit for next two doors

Module #	Name	Description
PTMLB	Main Logic Board	Central control panel, with resident cardholder database, event log and systems configuration. Communicates with PC or Modem via RS232, and to other modules via LonWorks.
PTMLBX	MLB Expanded	Version with expanded memory for increased cardholder and event log capacity. Also supports PassPoint Scripting™ feature.
PTDCM	Door Control Module	Two door control panel
PTQRM	Quad Relay Module	Four form C relays and four trigger outputs panel
PTZIM	Zone Input Module	Eight zone input panel
PTVGM	VISTA Gateway Module	An interface to the VISTA128 series of fire/burglary panels, allows seamless integration of access control. The VGM alone with PassPoint can act as a dialer to a central station and supports Contact ID messaging.
PTCEKPROX	Card Enrollment Kit	A desktop station which uses a prox reader to act as a dedicated enrollment terminal for the management of the cardholder database
PTCANPOWER	System enclosure with PassPoint Intelligent Power Supply unit	Can accommodate two electronic boards, and power supply can drive two boards, two readers, and two locks (450mA each).

All of these Modules are connected via the LonWorks' free topology, unshielded, twisted-pair network, and therefore may be implemented anywhere in the network.