



PRODUCT GUIDE



Welcome to **Keyscan Access Control Systems!**

Whether you are a security dealer, integrator or end-user this product guide is designed to provide you with tangible information critical in your access control selection process. A process we feel after you have reviewed this material will be firmly positioned with Keyscan.

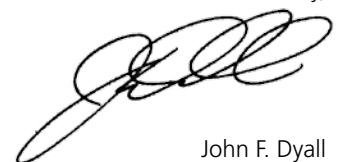
Keyscan has been dedicated to the design, engineering and manufacturing of premium access control equipment and software for over 24 years. Our team of experienced engineers continuously strive for excellence creating products that are not only reliable 365 days a year, but also easily installed, setup and managed. With powerful features and capabilities designed into every aspect of our product line you can be confident that Keyscan has the solution you are looking for today with the scalability and vision to support you well in the future.

Our 'one platform' hardware and software strategy for access control comfortably supports the smallest of access control installations while handling multi-building, nation-wide enterprises with several hundreds of doors with unprecedented ease, providing you with an access control system designed with your business in mind. With Keyscan you don't get punished for growing your access control system with expensive software upgrades or yearly licensing fees. Furthermore, once you are comfortable installing and or managing the Keyscan system the possibilities are only limited by your vision and not by product limitations or software governors that restrict performance beyond a certain expansion point.

All access control manufacturers are not created equal. Many are in fact software-only developers. These companies depend on 3rd party hardware and are limited to the hardware capabilities dictated to them. Keyscan's approach is quite the opposite. Keyscan strongly believes in controlling every aspect of our product and as such we fully design, engineer and manufacture all software and hardware in house. This control allows us to support and manage every nuance of our system. With this approach, you stand to benefit from the most stable and secure hardware and software platform available from any access control manufacturer.

Thank you for taking the time to investigate what Keyscan has to offer. Our team of skilled sales staff look forward to supporting your access control decision making process to ensure you get; What Access Control Should Be™, Keyscan.

Sincerely,



John F. Dyall
President

System VII

System VII is the most versatile access control management software package in the security industry.

System VII offers:

- Unlimited number of secured doors
- Scheduled backups
- Scheduled report generation with email delivery
- Built-in disaster recovery
- Reliable and robust 4GB SQL Express Database
- Present 3 reader based system control
- First Person In
- System lockdown for threat management
- 32,000 cardholders per site
- Unlimited number of sites
- 511 access groups
- 256 time zones with 512 schedules
- Industry renowned power and ease of use

Keyscan designs software with the end-user in mind because we believe security officers or administrators have more important things to do than manage a complicated security program.

System VII's suite of powerful optional software modules provide impressive integration opportunities for any organization looking to implement a layered security protocol within their organization. Keyscan is One System. One Solution. Total Control.

K-TV – CCTV Integration

Layer an advanced level of visual security with the Keyscan access control system. The software module turns System VII into a single software interface for your CCTV System.

K-DSC – DSC Integration

This software module provides incredibly powerful integration with the DSC Power Series of intrusion panels.

K-CM – Active Mapping

Even though System VII is extremely easy to use, navigate and operate, everyone appreciates the visual power of a real-time updated active map to actually show system status and even control the system. With this module everyone is a Keyscan expert in minutes.

K-BADGE – Photo Badging

Assigning cards or credentials to employees is one thing, but assigning a credential with their photo printed on the credential itself takes employee security to the next level. Everyone on staff becomes an extension of the security team identifying fraudulent card holders with a quick glance.

K-WEB – WEB Client

Managing your Keyscan system on the run, wherever you are, has never been so easy. Add this WEB client module and manage your access system anywhere you have internet capability.

K-VIS – Visitor Management

Leverage System VII to the maximum and utilize its easy to use format to track, control and record visitors within your organization. Go as far as issuing a visitor level access control card as well as provide employees with integrated email notification of visitor arrivals. Its all there with K-VIS.



Keyscan CA8500 – 8 Reader Access Control Panel

The next generation of Access Control Hardware

Propelled by innovation, Keyscan has engineered the CA8500 with a host of new features including 8MHz dual processors ensuring full panel operation even during system downloads; Easily configurable reader settings supporting Wiegand protocols; New system status LEDs for instant system troubleshooting; off-board relays allowing for low cost replacement if the need should ever arise; and one additional output supporting sounders at readers. Plus, with the entire cardholder database retained on the panel, Security Managers or Directors can rest assured that security is never compromised if communication with the panel fails for any reason. The panel's auto transfer protocol uploads the event buffer when communications are reestablished.

The CA8500 is designed, engineered and manufactured with exacting standards, by Keyscan. Fully engineered and optimized to operate with Keyscan access control software; together it offers the most enhanced user experience to date.



CA4500 – 4 Reader Access Control Panel

The CA4500 provides all the power and versatility of Keyscan's CA8500 8 reader panel with the added ability to optimize system installations to suit the desired number of doors to be secured. As with the CA8500, the CA4500 may be installed close to a cluster of doors to reduce wiring runs then tapped into a LAN/WAN or wireless LAN, among other options to establish communication connectivity.

CA250 – 2 Reader Access Control Panel

The CA250 adds further system design optimization to economically handle a small building with just few doors or to secure a couple remote doors within a larger system. As with the CA8500 and CA4500 communication connectivity may be established with LAN/WAN or wireless LAN among other options.

EC1500 – 1 Cab Elevator Access Control Panel

The EC1500 controller is designed to secure office floors by prompting cardholders to present their assigned credential when using the elevator rather than a door. It leverages the same hardware architecture as its CA8500/4500/250 counterparts. It can be seamlessly mixed and matched within a Keyscan system and connect via LAN/WAN or even a wireless LAN. Based on permissions established using Keyscan access control software, only those floors assigned to a cardholder will be available for selection. It also integrates with telephone entry systems to provide a completely integrated visitor entry system.

The EC1500 will:

- Secure up to 40 floors with a single controller
- Track/limit floor access by cardholder
- Provide independent control for every floor
- Interface with telephone entry systems
- Support 1 Cab with 1 Reader
- Easily allow floor expansion with add-on OCB8 relay boards

EC2500 – 2 Cab Elevator Access Control Panel

Like its EC1500 counterpart, the Keyscan EC2500 may also be mixed and matched within a Keyscan system. The EC2500 controller is best suited for 2 elevator cabs with identical access levels and permissions. It offers 2 reader ports for each of two elevator cabs and provides floor access control for up to 16 floors per cab. The EC2500 also has communication connectivity via LAN/WAN or wireless LAN among other options.

The EC2500 will:

- Secure up to 16 floors per elevator cab
- Track/limit floor access by cardholder
- Provide independent control for every floor
- Interface with telephone entry systems
- Support 2 Cabs, 2 Readers
- Easily allow floor expansion with add-on OCB8 relay boards



Peripherals

CCTV

Proximity Card Readers

Elevator Access Control Panels

Access Control Management Software

K-SMART – Contactless Mifare® Smartcard Reader

Keyscan has developed a contactless smartcard reader that eclipses the security offered by standard 125kHz proximity readers. Never again be concerned of card/credential duplication. With K-SMART's built in support for smartcard security and Mifare encryption along with Keyscan's additional AES multi-layer encryption, K-SMART users benefit from the convenience of a contactless credential with the incredible security that only a smartcard credential based access control system can offer.

Keyscan's innovative K-SMART reader provides other advanced features such as a built-in heartbeat that when connected with System VII monitors periodic reader communication advising end-users the moment any type of malfunction is detected. And if that wasn't enough K-SMART offers a tamper circuit that notifies the end-user if a reader is removed from the wall. Combine all this and you truly have a smart reader available only from Keyscan.

- K-SMART: Contactless Mifare smartcard readers with advanced AES encryption when used with K-SECURE credentials.
- K-SMART-125: Transitional Reader supports both 125kHz prox as well as contactless Mifare smartcards with advanced AES encryption when used with K-SECURE credentials.
- K-SMART-GOV: US Government FIPS201 transparent reader. Passes the 75bit CHUID onto the PACS for processing.

K-SMART. The Smart Choice



K-KPRSM – Contactless Smartcard Reader & Keypad

Keyscan's new combination contactless Smartcard reader and keypad offers 2-factor authentication. Users benefit from the convenience of a contactless Smartcard credential with the added layer of keycode security.

Keyscan's K-KPRSM reader provides other advanced features such as a built-in heartbeat that when connected with System VII monitors periodic reader communication advising end-users the moment any type of malfunction is detected.

And, K-KPRSM offers a tamper circuit that notifies the end-user if a reader is removed from the wall.

K-PROX2 – 125kHz PROX Reader

Keyscan's highly reliable K-PROX2 125kHz proximity card reader provides a sleek black finish with clear LED illumination for access granted and denial indications. Its on board beeper may also be used to generate audible tones for conforming with Americans with Disability Act (ADA) requirements or simply to sound a local door held open alert. K-PROX2's versatile 2 in 1 design provides both mullion mount and single gang mounting options all with a single unit. The provided single gang mounting plate is made of PVC material, use it when you need it or recycle it when you don't, its that simple! With its epoxy encased electronics this reader is well suited for both interior or exterior use. And with an impressive read range of 4 to 6 inches not to mention Keyscan's limited lifetime warranty there is no other logical choice to support your 125kHz proximity requirements



K-KPR – 125kHz PROX Reader & Keypad



Building on the success of K-PROX2 this integrated proximity and keypad unit adds an additional layer of security when needed. When used on a Keyscan system, you control proximity only, proximity and passcode or passcode only operation. It's this level of unprecedented flexibility that has become a Keyscan trademark. Benefit from Keyscan's limited lifetime warranty.

K-VAN – 125kHz Vandal Resistant PROX Reader

When adding access control into rough environments rely on Keyscan's K-VAN 125kHz proximity reader. This vandal resistant reader is constructed of a solid stainless body with a bullet resistant insert. The reader may be secured to the wall with front facing security screws or from the rear with four blind mount screws. Ideal for schools, recreation facilities, police departments, hospitals and any other facility where readers may be exposed to rough environments or the potential of vandalism. The K-VAN is suitable for both interior and exterior use.



K-RX – Wireless Receiver

Refer to the K-RX wireless receiver for garage, gate or other long range applications. Use the K-TX2 transmitter to wirelessly transmit signals from up to 200 feet away. The K-RX then transmits the signal via hardwired Wiegand for access control panel privilege confirmation. With rolling security codes and Keyscan's built-in authentication routine the K-RX

and K-TX2 delivers a secure solution. Best of all, The K-TX2 acts as a regular fob when presented to standard prox readers within the facility. End-users will enjoy carrying a single stylish key-ring credential that covers all their access control needs.



- K-TX2: 4 button 125kHz wireless transmitter with matching 125kHz proximity coil
- K-INTX2: 4 button Indala wireless transmitter with matching Indala proximity coil
- K-STX2-1K: 4 button K-SECURE transmitter with matching K-SECURE1K coil
- K-STX2-4K: 4 button K-SECURE transmitter with matching K-SECURE4K coil

13.56 MHz Smartcard Credentials

K-SECURE – Contactless Mifare® Smartcard

Combine the power of Keyscan's K-SMART Contactless Mifare® Smartcard Reader with the ultimate in contactless smartcard credential technology. Keyscan's K-SECURE Contactless Mifare® Smartcard is equipped with numerous anti-counterfeiting and card anti-duplication technologies. And just as with the K-SMART reader, Keyscan has layered its own robust AES multi-layer encryption technology onto the K-SECURE.

K-SECURE is designed for access control applications with the exceptional versatility to store third party applications including biometric templates. And if that wasn't enough, K-SECURE cards are also ISO printable!

Combine K-SMART readers and K-SECURE credentials and benefit from the very best in access control and security.

K-SECURE is The Secure Choice.

*available in 1K and 4K memory formats



125 KHz Proximity Credentials

CS125-36

Keyscan's CS125 standard proximity clamshell cards are designed to be used with Keyscan proximity readers K-PROX2, K-SMART-125, K-KPR, K-VAN & K-SMART-GOV/125 as well as HID 125 KHz compatible readers. They are available in both 36 bit and 26 bit Keyscan format and offers up to a 4" read range.

F125-36

Keyscan's CS125 standard proximity clamshell cards are designed to be used with Keyscan proximity readers K-PROX2, K-SMART-125, K-KPR, K-VAN & K-SMART-GOV/125 as well as HID 125 KHz compatible readers. The F125 is available in both 36 bit and 26 bit Keyscan formats and offers up to a 2" read range.



K-FOB-1K & 4K

Keyscan Mifare Contactless Smart FOB utilizes AES Rijndael 128 bit Encryption for outstanding security. They are designed for use with Keyscan smartcard readers (K-SMART, K-SMART-125, K-SMART-GOV/125 and K-KPRSM). They are available with Keyscan 36 bit secure format with 1K memory. For added memory convenience, a 4K FOB is also available.

DVR2-2TB

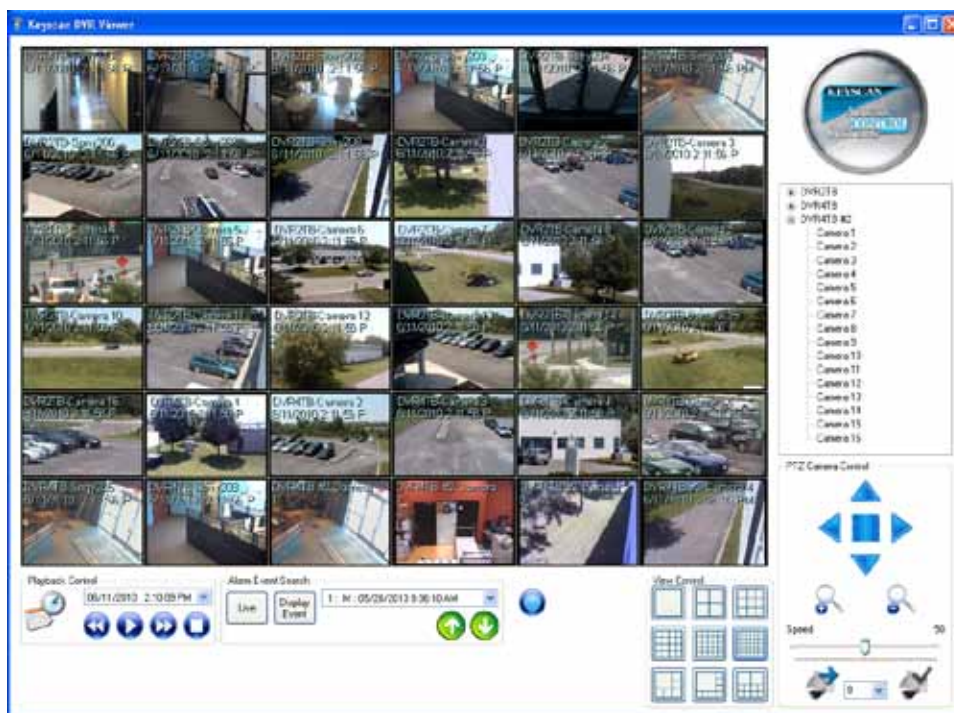
Keyscan's DVR2-2TB combines the flexibility of a hybrid DVR with the outstanding capacity of up to 8 Terabytes (8TB) of video storage*. This 16 channel DVR can accommodate up to 8 IP cameras, and provides an impressive combined 480 pps at D1 resolution. To harness this high rate of video feed the DVR2-2TB utilizes H.264 video compression technology, offering remarkable storage capacity and based on the selected recording setting a playback quality that is crisp and clean. As a stand alone unit, or fully integrated with Keyscan Access Control Systems, the DVR2-2TB provides the reliability and ease of use you have come to expect from Keyscan.

*8TB of storage available with the DVR2-4TB, and two USB external 2TB (EXT-2TB) expansion hard drives (See ordering options)



General Features

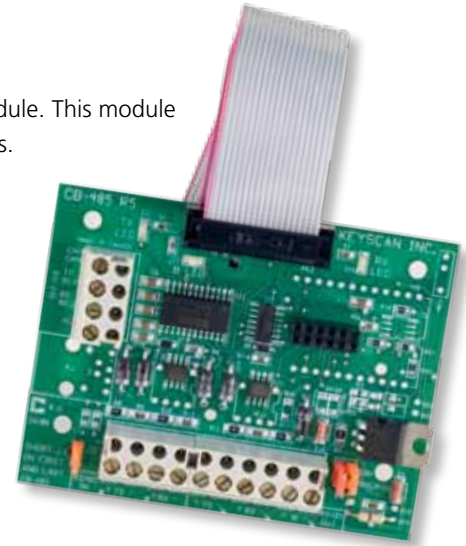
- 16 analog channel output / input
- 480 PPS recording at D1 resolution (NTSC). (Up to 30 PPS per camera)
- Up to 8 channel network camera support (megapixel support)
- H.264 Compression
- HDMI (Main Monitor) Output
- 16 audio inputs
- NTP time synchronization
- Built-In Pelco Coaxitron® protocol
- Gigabit LAN port
- USB Mouse Support
- Easy-Menu System
- Built-in DDNS
- IR Remote Control
- Voucher for K-TV CCTV license included with DVR for integration with Keyscan software



CB-485 – RS485 Communication Adapter

Interconnecting Keyscan control panels could not be easier with the CB-485 communication module. This module uses the robust RS-485 communication protocol to establish communication with multiple panels.

Using standard Cat5 cable this cost effective module is rugged and reliable, ensuring maximum communication speeds at distances of up to 2000 feet between control panels.



NETCOM2P – TCP/IP Plug-on Communication Adapter

When desirable, placing a group of CB485 interconnected control panels on a network backbone is accomplished by plugging the NETCOM2P on the first CB485 equipped panel. All other panels are then communicated with via the NETCOM2P's programmable network address. Also available with AES Rijndael 256 bit encryption, part number NETCOM6P.



NETCOM2 – TCP/IP Communication Adapter

For remotely installed single panels, perhaps installed at the far end of the building to reduce wiring costs, rely on the NETCOM2 for establishing network based communications. This versatility provides extremely flexible system designs.

Also available with AES Rijndael 256 bit encryption, part number NETCOM6.



NETCOM2WH – Wireless TCP/IP Communication Adapter

When it is just not possible to run a cable or hardwired network to the panel, the NETCOM2WH provides a wireless communication option.

Relying on standard 802.11b/g protocols this device may be configured as an Adhoc wireless network or added to a more comprehensive wireless LAN environment. Also available with AES Rijndael encryption, part number NETCOM6WH.



USB-SER – Communication Adapter

When connecting to a computer the USB-SER provides Keyscan backed system compatibility and offers RS485 to USB conversion as well as RS232 to USB conversion all on one compact easy to use device. The USB-SER is ideal for technicians, on the road demonstrations and instances where the access control computer does not have a serial communication port. The USB-SER does not suppress data like many other off-the-shelf converters.



VBP-408 – Evolis Single Sided Die Sublimation Printer
VBP-408DBL – Evolis Double Sided Die Sublimation Printer

Adding impressive employee, student or visitor badges has never been easier with Keyscan's line of card printers. These printers provide guaranteed integration with System VII and provide the highest quality, durable graphics printing available from a printer of its size. Conveniently place the small footprint Evolis or Dualys printers on any workstation or desk. Its quiet operation will surely be appreciated by the operator. Use this printer with any standard ISO printable card and add an additional layer of security with Keyscan's Photo-badging software module (K-BADGE).



VB-P408
Single sided card printing



VB-P408DBL
Double sided card printing

IOCB1616 – Input & Output Expansion Board

When high level system design calls for additional input and output capabilities Keyscan has you covered with the IOCB1616 I/O expansion board. A single IOCB1616 board provides 16 additional inputs with 16 additional open collector outputs with an easy to add relay output option if desired. For use specifically with the CA4000 and the CA8000 control panels, up to four (4) IOCB1616 boards may be connected to a single panel. With an RS485 interface between control panel and the IOCB1616 boards, systems designers have the choice of remotely installing one or more IOCB1616's up to 2000 feet away from the control panel. The result being considerable design flexibility and significant cabling cost reductions.

Ideal for monitoring exit only doors, glass breaks, motion detectors and any other sensing device all through the Keyscan System.



WIEEX2 – Wiegand Extender Board

Standard specifications state that a maximum Wiegand communication run not exceed 500 feet. Beyond such distances reliability concerns arise. When circumstances dictate a long cable run between control panel and reader, exceeding the 500 feet guideline, rely on Keyscan's WIEEX2 Wiegand Extender. This device converts the Wiegand single to standard RS485 providing a communication range of up to 2000 feet between WIEEX2 receiver and WIEEX2 transmitter while using standard CAT 5 cable between units. The standard RS485 output opens up a host of other design options such as RS485 to fiber optic modems and other mediums for transmitting the reader data if electrical isolation over long cable runs are desirable.

**Also available is Keyscan's CWIEEX2 coax to Wiegand converter.*





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KEYSCAN INC. LR110441 COMPLIES TO:

UL STD 294	Access Control System Units
CSA STD C22.2	0.4-M1982 Bonding and Grounding of electrical equipment
CSA STD C22.2	205-M1983 Signal Equipment
CE	

