





# Welcome to your introduction 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 manufacturuer.

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<sup>™</sup>, Keyscan.

Sincerely,

John F. Dyall President

# System VII Access Control Management Software

#### **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 a 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.





# **ACCESS CONTROL PANELS**

#### CA8000 – 8 Reader Access Control Panel

Keyscan's versatile 8 reader panel provides the ultimate in access control. Its dual processors ensure full panel operation even during system downloads. With the entire card holder database retained on the panel, Security Managers or Directors can rest assured that security is never compromised even if communication with the panel fails for any reason. The panels auto transfer protocol uploads the event buffer when communications are reestablished. And when all else fails, rely on Keyscan's panel based disaster recovery routine, effectively rebuilding the entire Keyscan database from the panel up.

Keyscan panels are designed with a heavy duty relays to ensure maximum longevity and durability. In fact these relays reside on their own board, separate from the control board, allowing for low cost replacement if the need should ever arise.

Designed, engineered and manufactured with exacting standards, by Keyscan.



#### CA4000 – 4 Reader Access Control Panel

The CA4000 provides all the power and versatility of Keyscan's CA8000 8 reader panel with the added ability to optimize system installations to suit the desired number of doors to be secured. As with the CA8000, the CA4000 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.

#### CA200 – 2 Reader Access Control Panel

The CA200 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 CA8000 and CA4000 communication connectivity may be established with LAN/WAN or wireless LAN among other options.



# EC1000 – 1 Cab Elevator Access Control Panel

The EC1000 leverages the same tried, true and tested hardware architecture as its CA8000/4000/200 counterparts. The EC1000 may be seamlessly mixed and matched within the Keyscan system to add enhanced security for any facility.

Keyscan elevator controllers are designed to secure floors by prompting cardholders to present their assigned credential to an elevator installed reader. Based on permissions only those floors assigned to the cardholder will be available for selection. The EC1000 may establish communication connectivity via LAN/ WAN or wireless LAN among other options.

Interface Keyscan elevator controls with telephone entry systems to provide a completely integrated visitor entry system with maximum control and audit capability. Ask Keyscan about our VIS-100 telephone entry interface module and supported telephone entry equipment.

- Secure up to 40 floors with a single EC1000 controller
- Track/limit floor access by cardholder
- Provides independent control for every floor
- Interface with telephone entry systems
- Supports 1 Cab, 1 Reader
- Floor expansion with add-on OCB8s

#### EC2000 – 2 Cab Elevator Access Control Panel

As with the EC1000 product the EC2000 may be mixed and matched within any Keyscan system. The EC2000 controller is suited for 2 elevator cabs with identical access levels and permissions. The EC2000 offers 2 readers ports, 1 for elevator cab 1 and one for elevator cab 2 providing floor access control for up to 16 floors per cab. The EC2000 may

establish communication connectivity via LAN/ WAN or wireless LAN among other options

- Secure up to 16 floors per elevator cab
- Track/limit floor access by cardholder
- Provides independent control for every floor
- Interface with telephone entry systems
- Supports 2 Cabs, 2 Readers
- Floor expansion with add-on OCB8s



Management Software



# **SMART CARD READERS & CARDS**

#### 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-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.

\*available in 1K and 4K memory formats

K-SECURE is The Secure Choice.



#### 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 KPROX2 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-TX 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-TX delivers a secure solution. Best of all, The K-TX 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-TX: 4 button 125kHz wireless transmitter with matching 125kHz proximity coil
- K-INTX: 4 button Indala wireless transmitter with matching Indala proximity coil



# COGENT 🦴 SYSTEMS

#### **SMART-GATE** – Biometric One to One Reader

Benefit from close to 20 years of biometric leadership from Cogent Systems. Cogent Systems is the leading provider of AFIS (Automatic Fingerprint/Palmprint Identification Systems) for government entities worldwide. The biometric algorithm employed in the Smart-Gate scored in the top 3 of 18 biometric companies for accuracy based on comprehensive NIST testing. Keyscan's Smart-Gate biometric reader leverages this experience to offer leading edge biometric technology with the enhanced integration only found from Keyscan.

With Smart-Gate the individuals biometric template is stored on their Mifare based contactless smartcard credential and not in an online database. The individual's biometric template truly never leaves their possession. Use the Smart-Gate Biometric reader within a Keyscan system using the K-SECURE contactless Mifare smartcard credential and benefit from Easy Step™ single software enrollment with 'bio at the reader' bio enrollment technology. Benefit from single finger enrollment with the K-SECURE 1K card or two finger enrollment with the K-SECURE 4K credential.



When the highest level of security is demanded, the two factor (Card & Bio) authentication provided by the Smart-Gate is the very best in technology today.



# **SEARCH-GATE – Tokenless One to Many Biometric Reader**

Leveraging the same bio technology offered in the Smart-Gate the Search-Gate provides leading biometric technology. Storing 1200 biometric templates locally on the unit provides lightening quick template validations while permitting growth by expanding template validations to an online database.

With Search-Gate all you need is a valid fingerprint to authenticate your identity and your access permissions. With an onboard relay use the Search-Gate in stand-alone mode or integrate with an access control system.

Versatility and security without the need of a card or credential;
That's the power of Search-Gate.



When multi-factor identity verification is demanded including FIPS and TWIC compliance the ID-Gate is the product. Designed with a keypad, a contact and contactless smartcard reader as well as a biometric fingerprint reader the ID-Gate offers the horsepower to address the most serious security need.

ID-Gate is suitable for both interior and exterior use.



# K-DVR – Hybrid 16 channel DVR

Keyscan's K-DVR provides 16 channels of video with the flexibility to support up to 4 IP cameras. Equipped with an impressive 1 terabyte of in unit storage with the capability of adding external NAS storage the K-DVR is designed to support the most demanding requirements.



















Keyscan, never one to skimp on functionality and impressive base features has equipped the K-DVR to support a whopping 480 PPS recording and real-time display while Triplex+™ Operation permits Live, Record, Playback and Network Viewing while recording 16 channels. The K-DVR is impressive on all levels; performance, reliability and standard features that are typically costly additions for other DVRs available on the market.

Benefit from advanced CCTV integration using System VII, a level of integration only available with K-DVR. Since it's a Keyscan product, benefit from worry free, plug and play integration for each and every install. No longer be concerned about flippant DVR manufacturers who's changes break integration, when they choose.

- Includes sophisticated Motion detection algorithms with the ability to trigger alarms using alarm relay outputs
- Mobile View™ software allows for remote viewing, programming and PTZ control from any wireless or internet connected PDA or phone
- ezBurn™; for quick video export
- ezRecord™; for quick recording setting
- ezDDNS™; for automatic DDNS configuration
- Built in transcoder provides detailed local video streaming with the added ability to auto adjust video streaming rates for remote sites
- Provides a heartbeat for System VII monitoring providing notification if any DVR recording issue is detected including internal temperature alarming and storage notifications
- Plus so much more







# **COMMUNICATION EQUIPMENT**

### **CB485 – RS485 Communication Adapter**

Interconnecting Keyscan control panels could not be easier with the CB485 communication module. This module uses the robust RS485 communication protocol to establish communication with multiple panels.

Using standard Cat 5 cable this cost effective module is rugged and reliable, ensuring maximum communication speeds at distances of up to 2000 feet between control panels.





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.

**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.





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.

# **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.



KEYSCAN

# **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).



VR-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.



### **WIEEX – 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 Keyscans WIEEX Wiegand Extender. This device converts the Wiegand single to standard RS485 providing a communication range of up to 2000 feet between WIEEX receiver and WIEEX 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 CWIEEX coax to Wiegand converter.







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#### **KEYSCAN INC. LR110441 COMPLIES TO:**

**UL STD 294** Access Control System Units

0.4-M1982 Bonding and Grounding of electrical equipment CSA STD C22.2

CSA STD C22.2 205-M1983 Signal Equipment CE



