

High Security and Key Control Solutions

medeco ASSA ABLOY

Medeco 4 Key Control Programs – Channel Partners

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Medeco 4 Overview

The History of Medeco 4 Technology

When the first Medeco cylinder rolled off the production line in 1968, only a few imagined the magnitude and effect that it would have in the security and locksmith industry. The concept of angled cuts, rotating pins, drill resistant steel inserts, a sidebar mechanism, and strong utility patents on the cylinders and keys finally gave security professionals the opportunity to offer a high security locking solution with total key control. These innovative ideas were new to the industry and Medeco quickly became the leader in what is now called the high security market.



In 1986, Medeco released Biaxial and again set the stage for the high security market. Medeco Biaxial offered much of the same protection as the Original design; however, many aspects of that design were improved upon. Fore and Aft cuts were added to the key and pin specifications, adding millions of theoretical combinations. Masterkeying capabilities were vastly improved and new key control programs were added to give the customer more options.

To improve upon both the Original and Biaxial designs, Medeco worked closely with locksmiths around the globe. This collaboration led to Medeco3–a patented high security cylinder that is **resistant to virtually all forms of attack**. These cylinders feature UL437 Listed and BHMA Grade 1 components, including triple locking technology for ultimate pick resistance and solid brass construction with strategically placed hardened inserts to thwart drilling attacks.

In 2021, the Medeco 4 high security cylinder was introduced. The M4 high security cylinder is also UL 437 listed ANSI/BHMA 156.30 Level A certified, and has patented key control. It also includes enhanced new features that take future threats into account.

In addition to bottom pins that lift and rotate, M4's design includes 4 Side Pins made up of 3 Finger Pins and 1 Lift Pin. The Lift Pin is activated by contact with the Shuttle Pin movable element in the key, providing a high level of pick resistance. The Finger Pins work with Secondary Side cuts on the key to provide increased security and greater potential combinations.

The patented M4 key with Shuttle Pin movable element protects against the emerging threat of 3D printing for added credential security.

Medeco 4 Overview (cont.)

Medeco 4 High Security Cylinders feature UL 437 Listed and BHMA Grade 1 components. Passing UL 437 and BHMA's rigid testing procedures reaffirms the cylinder's ability to protect people and property. M4 builds on Medeco's 50+ years of lock engineering innovation and takes security to the next level while still offering the highest level of protection against unauthorized key duplication.



Patented Key Control

Protects against unauthorized duplication of your keys.



Protection Against 3D Printing

A patent-pending movable element in the key deters against unauthorized 3D printed copies of keys or blanks



Uses Existing Hardware

M4 cylinders are available in a wide variety of formats, retrofitting most hardware on the market.



Master Keying Capabilities

M4 cylinders can be master keyed into a system that includes M4, M4 BiLevel, and M4 CLIQ keys and cylinders. Very large systems are possible.



Protection From Physical Attack

UL 437 listed and stand up to drilling, picking, and other forms of physical attack ANSI/BHMA A156.30 certified.



Special Angle Cut Keys

A special key cutting machine and access to Medeco-specific blanks are required to duplicate M4 keys, which are available in multiple levels of restriction to support every need.



Picking and Bumping Protection

Cylinder side pins, a shuttle lift pin, and a movable key element engage a sidebar that prevents the key from turning until the elements are rotated and aligned in the correct position, protecting against bumping, picking and other attacks.

Program Overview

Medeco Key Control Program History

Unparalleled Key Control is an integral part of Medeco's DNA. In fact, one can argue that Medeco created the Key Control market. Their decision to patent the designs of both the cylinder and keyway was unprecedented and led to the establishment of a high security locking solution. Almost 60 years later, Medeco is still an industry leader in innovation and quality, guarding lives and assets at facilities worldwide.

Medeco Key Control Programs remain relevant and respected because they are structurally strong, protect the integrity of the product, and protect distributors and dealers from liability.

Key Control Program Features:

- State of the art product design
- Strong worldwide patents
- Effective key control agreements
- Protected keyways
- Enforcement
- Key system design
- · Custom coining
- Testing & certifications

Medeco 4 Key Control Program Overview

Dealer/Service Center

This program offers instant local access to additional keys with protection from unauthorized copying. Consumers simply return to the security provider from which they purchased the locks. The security professional will have key records on file locally referencing the owner or authorized users of the key system.

Carded Programs

Authorized individuals are issued a card with embossed control data and a space for their signature. To obtain key duplicates, card holders present the card to any participating Medeco security professional. The data and signature will be verified and a key can then be issued. A card program is ideal for residences or businesses that need keys available nationwide.

Wholesale/Distributor Programs

Authorized individuals are issued a card with embossed control data and a space for their signature. To obtain key duplicates, card holders present the card to any participating Medeco security professional. The data and signature will be verified, an order form is sent to an authorized distributor, and a key is issued by the distributor.

Factory Restricted Program

Additional cut keys are only available from the Medeco factory and only with the proper signature or electronic authorization.

Benefits

Medeco 4 Key Control Program Benefits

More Innovation

The technology built into M4, including the movable key element, and side and lift pins in the cylinder, stretch the boundaries of features that can be built into a lock and key system.

More Protection

Cylinder side pins and a lift pin which engage the sidebar prevent the key from turning until the elements are aligned in the correct position, protecting against bumping and picking.

Patent-pending movable element in the key deters against 3D printed copies of keys.

More Combinations

Secondary side-pin bittings provide expanded master keying capabilities.

M4 cylinders can be master keyed into a system that includes M4, M4 BiLevel, and M4 CLIQ keys and cylinders.

More Security

Patent-pending key control protects against unauthorized duplication of keys.

Medeco specific key blanks and key cutting machine are required to duplicate M4 keys, which are available in multiple levels of restriction to support every need.

Protection Against Unauthorized Key Duplication

Permission for copying keys is provided after presenting identification and/or signature verification. This ensures that it's virtually impossible for someone to duplicate a key without proper permission.

Control Liability and Reduce Risk

Investing in a key control program protects against a potential liability for your facility by preventing unauthorized duplicate keys from infiltrating your security system.

Code Compliance

Universities, hospitals, and many other institutions must comply with various regulations. Medeco 4 is available in both high security mechanical and Intelligent Key technologies to meet the multifaceted needs of end users.

Key Control Agreements

Key Control Agreements outline the basic guidelines and principles for good solid key control and help keep the integrity of your key system intact for the life of your system.

Custom Coining

Custom coining is a factory key blank marking process that enhances the security value of the key. Medeco custom coined blanks leaves the key with a secure raised marking and jewelry style finish.

Patent Protection

Stamping "Do Not Duplicate" on a key is not a promise of legal protection or enforcement. The only legally enforced way to ensure that keys won't be copied without owner consent is with a system having patent-protected keys. The Medeco 4 design is patent protected to 2040.

Dealer/Service Center Benefits

Dealer/Service Center Program Benefits

- 1) Dealer can obtain factory certification and training on system setup, installation, and ongoing support
 - Master keyed system design
 - Pinning cylinders
 - Cutting keys
 - Ongoing system services
 - Upgrade to Intelligent Keys
- 2) High security platform that's factory controlled and limited in the market place
 - Medeco restricted dealer keyway programs offer security professionals a proprietary key section to deploy systems for multiple customers in their local markets
 - Custom coining program offers security professionals a "business card" on every keyblank
 - Gives customers a direct way to find and contact your business
 - Recurring revenue opportunity as cylinders and keys are deployed on the dealers' restricted keyway
- 3) Recognized on Medeco's website as a certified program dealer
- 4) M4 program offers extensive master key capability for any customer size
- 5) Full retrofit line to upgrade almost any hardware
- 6) Quick turn opportunity to capture the sale immediately by investing in inventory that can be pinned, keyed, and deployed same day
- 7) Upgradeable to Intelligent Key solutions.

Distributor/Wholesale Benefits

Distributor/Wholesale Program Benefits

- 1) Stock, deploy and service systems to dealers and/or end users seeking a trained professional to provide key system management
 - Customers invest in a restricted distributor/wholesaler keyway program
- 2) Provide restricted product to customers nationwide
- 3) Provide on-site key cutting for quick order turnaround
- 4) Unmatched master key system flexibility -suitable for system of any size
- 5) Quick turn opportunity to capture the sale immediately by investing in inventory that can be pinned, keyed, and deployed same day
- 6) Upgradeable to Medeco Intelligent Key solutions

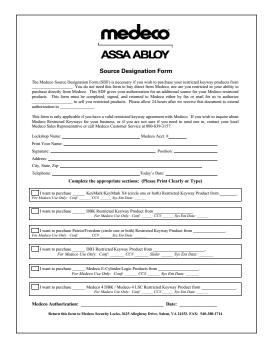
Source Designation Form

Medeco is proud to provide our dealer/distributor channel partners with multiple sources for procuring our products. We've partnered with the leading Wholesale Distributors to carry select dealer/distributor cylinders on the shelf to provide quick, easy, and efficient supply of our product lines.

As part of our commitment to key control, Medeco requires a onetime Source Designation Form (SDF) to be completed if you wish to purchase your restricted keyway products from our Wholesale Distribution Partners.

- Individual SDF's are required for each wholesaler you wish to purchase from
- SDF's offer the ability to purchase any or most of your restricted keyway products from a Regional or National Wholesale Partner

To take advantage of the inventory carried on the shelves from these wholesalers, please contact your wholesaler of choice or Medeco to obtain your source designation form.



DND Distributor Program Features

Medeco 4 DND Distributor Program

Description

- Requires positive identification with authorization card for key duplication
- Authorization card (pictured) supplied with each key system or key code when shipped from factory.
- Key blanks are only sold to authorized DND distributors
- Process for obtaining DND cut keys:
 - 1) End-user presents authorization card to participating locksmith
 - 2) Locksmith completes electronic request and obtains customer's signature
 - 3) Distributor processes request and supplies locksmith with DND cut keys

Requirements

- Buy-In: \$20,000 NET first branch, \$10,000 NET for subsequent branches thereafter
- No annual purchase requirement
- 600 keyblank minimum
- · Medeco approved key machine required

- Nationwide program
- Ideal Dealer: wants to offer Medeco high security solutions without the expense of buying into their own keyway
- Ideal End-User: wants flexibility to get keys cut at any Medeco dealer



Freedom Dealer Program Features

Medeco 4 Freedom Dealer Program

Description

- Developed as a continuation of the successful Medeco 3 Freedom program
- Utilizes computerized communications between the locksmith's location and the Medeco factory
- Authorization cards are tracked electronically and audit trail is generated each time a key is cut
- Process for obtaining Freedom cut keys:
 - 1) End-user presents authorization card to participating Freedom dealer
 - 2) Locksmith verifies identity of end-user and swipes card through reader
 - 3) The card reader will connect with the host server, located at the Medeco factory, and will verify the contents of the authorization card.
 - 4) Host server will send the bitting information back to the locksmith in the form of a printable receipt
 - 5) Locksmith cuts keys

Requirements

- Buy-In: \$1,500 NET
- No annual purchase requirement
- 200 keyblank minimum

- Nationwide program
- Ideal Dealer: does not want to invest in high-end or higher restricted systems
- Ideal End-User: customer who wants a restricted system where positive ID is required to obtain key copies at any participating Medeco 4 Freedom dealer nationwide (U.S. & Canada)



LSC Service Center Program Features

Medeco 4 LSC Service Center Program

Description

- High level of keyway exclusivity for our locksmith service centersdeveloped after successful LSC program
- Utilizes a restricted key control agreement to ensure product is only available to contracted dealers
- Allows locksmith to manage and maintain master key systems for customers



- Process for obtaining cut keys
 - 1) Medeco requires dealers to create a systematic way to manage and authorize key holders or persons requesting copies
 - 2) Medeco requires dealers to obtain signature from authorized recipients prior to cutting additional keys
 - 3) Dealers are required to stock keyblanks to provide quick, professional service for customers (keyblanks not stocked at distributors)

Requirements

- Buy-In: \$20,000 NET
- No annual purchase requirement
- 250 keyblank minimum

- Ideal Dealer: industry leaders who seek high level of keyway exclusivity for their businesses. Security professional with well established single retail location or multiple retail locations.
- Ideal End-User: facility seeking a patent protected, restricted offering from the most qualified security professionals in the Medeco family













DBK Dealer Based Keyway Program Features

Medeco 4 DBK Dealer Based Keyway Program

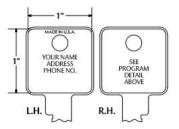
Description

- High level of keyway exclusivity for our locksmith dealer partners -developed after successful DBK program
- Utilizes a restricted key control agreement to ensure product is only available to contracted dealers
- Allows dealer to manage and maintain master key systems for customers
- Key duplication is restricted to the original DBK distributor who provided the system to the end user
- Process for obtaining cut keys
 - 1) Medeco requires dealers to create a systematic way to manage and authorize key holders or people requesting copies
 - 2) Medeco requires dealers to obtain identification from authorized recipients prior to cutting additional keys
 - 3) Dealers are required to stock keyblanks to provide quick, professional service for customers

Requirements

- Buy-In: \$6,000 NET, plus key machine
- No annual purchase requirement
- 250 keyblank minimum

- Ideal Dealer: well established security professionals (single retail location or multiple retail locations) seeking restricted keyway product to service their customer base.
- Ideal End-User: customer seeking a high security, patent protected, restricted offering from vetted security professionals



Technology Comparisons

	Medicolor ASSA ASI, DY Ng. 518	Medicolor Assa, Assa, Original States	ASSA ABLOY 515	medeco' ASSA ABLOY Qve	medeco
	M4	M4 BiLevel	Medeco ³	Biaxial	Original
Patent Protected	✓	✓			
Patent Protection Through	2040	2040	Expired	Expired	Expired
High Security Cylinder	✓		✓	✓	1
Custom Coining	✓	✓	✓	✓	
Retrofit Capabilities	√	1	1	√	1
Intelligent Key Compatible	✓	✓	✓		
Recommended For	High security, patented keyway, & new installations.	High security, patented keyway, & new installations.	Pick/drill resistance and to maintain existing systems.	Pick/drill resistance and to maintain existing systems.	Pick/drill resistance and to maintain existing systems.
Key Control Programs	Freedom, DND, LSC, DBK	Freedom, DND, LSC, DBK	Freedom, Gotham, NYC, DND, LS3, DB3, DB3-D, CW3	Patriot, Libery, NUK, GLD, LSC, DBK, CWS	RBA, SKY

Onboarding Process

Onboarding Process

- 1) Review all available restricted key programs with prospective dealer/distributor
- 2) Medeco Sales Representative will request a "Restricted Key Control Agreement"
- 3) Dealer must read and agree to terms of the "Key Control Agreement"
- 4) Dealer signs a hard copy of the agreement and delivers it to Medeco via the following methods:
 - U.S. Mail: 3625 Alleghany Drive, Salem, Virginia 24153; Attention: Contracts Department
 - U.S. email: rhonda.loyd2@assaabloy.com
 - Canada Mail: Medeco Key Records, 160 Four Valley Drive, Vaughan, ON L4K 4T9
 - Canada Email: orders.medeco.ca@assaabloy.com
- 5) Along with the agreement dealer must provide the following:
 - Source Designation Form (if ordering through wholesalers)
 - Opening Purchase Order totaling required NET investment
 - Completed Coining Die Form

Custom Coining Program

Custom Coining Die Program

Custom coining is a factory key marking process that is used to enhance the security value of the key. It uses the same process as the US Treasury Department for marking currency, leaving the key with a raised marking and jewelry style finish.

Custom coining dies for dealer and distributor partners are used for many mutual purposes:

• Providing dealers and distributors with a unique way to market your business.

Coining dies may include:

- Company name
- Company logo
- Physical address
- Contact information
- Custom design or artwork
 - Providing end users, dealers, distributors and Medeco with a means of elite key control.
- Every keyblank shipped from Medeco contains a coining die for security and key control purposes



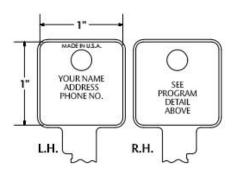












Frequently Asked Questions

What material are your keys made of?

Medeco only supplies cut keys and key blanks that are constructed of the highest quality nickel silver.

Is the Medeco 4 key system patented?

Yes - it is a highly restricted, utility patented keyway that is protected through 2040.

Have you had to defend your patent in court before?

Yes -Medeco has a strong history of enforcement with our patents. There are legal ramifications for any person who makes copies of our patented keyway without proper authorization.

What happens when the patent on the Medeco 4 key system expires?

Even after patent expiration, Medeco 4 will still offer a high degree of protection/attack resistance and restricted key control.

Do you have a warranty of your keys?

Yes –Medeco offers a lifetime warranty on mechanical key blanks.

Applications

Medeco 4 Key Control Program Applications

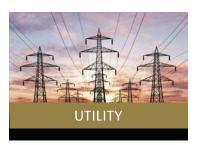


















Notes

The ASSA ABLOY Group is the global leader in access solutions. Every day, we help billions of people experience a more open world.

ASSA ABLOY Opening Solutions leads the development within door openings and products for access solutions in homes, businesses and institutions. Our offering includes doors, frames, door and window hardware, mechanical and smart locks. access control and service.

