

*high security locking technology*  
*self powered - backlit display*  
*three modes of operation*



BEYOND SECURITY

**KABA®**

# Kaba Mas X-10™ Type 1F High Security Electronic Locks



# Kaba Mas is proud to announce the X-10 with a Backlit LCD Display!



## **The Best Just Got Brighter.**

Poorly lit areas make it difficult to see a lock's visual control, and temporary lighting is a potential security issue. The X-10 now has the solution - simply turn the dial and the X-10 LCD screen illuminates. The X-10 was originally designed with the backlit feature in mind. Approved by the GSA after its first test submittal, the backlit feature is standard on all X-10s as of 3/24/2014. Nothing else changes, including part numbers and price. Buy with confidence - starting 3/24/2014, all X-10 locks come with a two year warranty!

# X-10: The GSA Approved Lock for FF-L-2740, Revision B, Style 1 Applications

## SECURE TRADITION

The Kaba Mas X-0 series is the trusted choice for securing the US Government’s most sensitive material. The X-0 series was first introduced in 1992 as the lock to meet the strict requirements of Federal Specification FF-L-2740. This specification is the US Government’s highest security standard for electro-mechanical locks. The X-10 represents the latest edition to this secure tradition. The X-10 is the GSA (General Services Administration) approved lock for FF-L-2740, latest revision B, Style 1 applications. The X-10 is approved by the GSA for use on approved Class 5 and 6 filing cabinets and Class 5 Security vault doors.

## WHY THE X-10?

The X-10 was designed and developed as a direct result of the latest revision to federal specification FF-L-2740, now Revision B. This revision calls for two distinctly different lock styles. Be aware that the characteristics and operating features of a “Style 1” and “Style 2” lock are not equal! The X-10 is the only self-contained lock and now, with the backlit LCD display, clearly represents the best overall value. The X-10 is the lock awarded the distinction of being approved for Style 1 Applications.

## USER FRIENDLY FEATURES

The X-10 was designed with similar features and functions of its predecessor, the X-09. This minimizes the need for user training. The X-10 maintains the already familiar product operating features. The X-10 uses the same “Green” self-powered technology - simply rotate the dial to power-up the lock. The proprietary Kaba Mas self powered feature eliminates the concern of an unexpected failure due to battery life. The X-10 retains the same three security modes, along with a full complement of audit features.

## WHAT'S NEW?

The following chart lists the enhanced features of the X-10 versus its predecessor the X-09:

Feature	X-09	X-10	Comments
Backlit Display	N/A	Standard	Ease of Use
Lock Case	Field Assembly	Through Case Mounting	Ease of Installation, Sealed Case
Serial Number	Six-Digit	Eight-Digit	X-0 Series, 1 Million Sold
Lock Motor	Stepper Motor	DC Motor	New Lock Design
Lock Cable Orientation	3 Hrs. Behind Bolt	Opposite of Bolt	New Lock Design
Lock Bolt Options	Flush & Extended - 4 Options	One Bolt Flush - Tapped	Enhanced Design, Fewer Parts
Product Identification “Dial Ring”	Factory Location, Month & Year Made	Product ID, Location, Month & Year Made	Product Differentiation
ID Stamp Location	9:00	8:00	Product Differentiation

The X-10 has been designed to enhance user friendly features, while improving security. For example, the lock case incorporates a through case mounting feature to improve ease of installation while protecting the lock’s internal electronics and mechanisms. The lock case has a security seal which provides a visible indication the lock has been accessed.

# X-10 High-Security Lock Features



## PRODUCT FEATURES

- **Power:** ..... Internal, self-powered by "Green" Rotational electromechanical PowerStar™ technology.

## COMBINATIONS – 3 MODES:

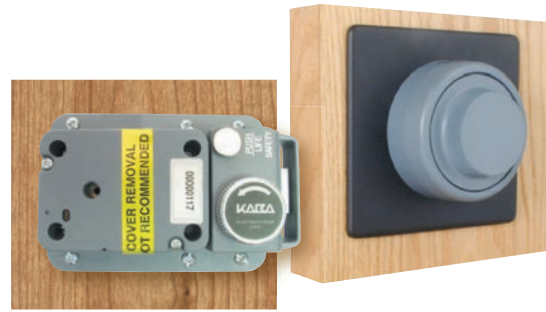
- **Single:** ..... 1 million combinations
- **Dual:** ..... 500 billion combinations
- **Supervisor/Subordinate:** ..... 2 million combinations
- **Direct Dial:** ..... No need to clear before entering combination. Once you stop turning the dial, the power will shut down after 40 seconds.
- **Memory:** ..... Non-volatile
- **LCD (Backlit):** ..... Limited View Backlit Liquid Crystal Display with visual controls makes dialing easy and exact.
- **Combination Changes:** ..... (LCD indicator in change key mode.) Combination changed with correct combination or serial number.
- **Random Number View:** ..... True Scramble
- **Daylocking:** ..... No
- **Back Dialing:** ..... No
- **Lock Reset:** ..... Automatic when bolt is thrown or 40 seconds after turning has stopped.
- **Manipulation:** ..... Meets all requirements of FF-L 2740B. Resists opening through manipulation for 20 man-hours.
- **Audit:** ..... The X-10 records all openings, and the record is non-resettable. The X-10 records unsuccessful attempts after 3 incorrect combination attempts and resets after a correct opening.

- **Wrong Try Penalty:** ..... 10-14 errors results in a 3 minute time out. 15 errors or greater results in a 4 minute time out. Both error count and penalty time resets with valid combination.

## PERFORMANCE FEATURES (PER FF-L-2740B)

- **Temperature:** ..... Tested -10°F to 155°F Operational Range.
- **Salt Spray:** ..... Operational After 72 hours of continuous exposure (per UL 768 Salt Spray Conversion Test).
- **Cycle Test:** ..... Meets or exceeds FF-L-2740B specifications.
- **Humidity:** ..... Operational after 10 days of 140°F @ 98% humidity (Operational after 10 days testing per MIL-STD-810E, Method 507.3, Procedure III, Temperature Cycling 86°F to 140°F @ 98% RH)
- **Stress:** ..... Operational after 7 days in a stress chamber @ 194°F (per UL 768 Aging Stress Distortion Test).
- **Vibration:** ..... MIL-STD-810
- **Shock:** ..... MIL-STD-901
- **Electrical Discharge:** ..... 250KV on Dial
- **Electromagnetic Pulse:** ... Meets FF-L-2740B specification for simulation of high altitude nuclear blast.
- **Case & Bolt Strength:** ..... 600 pounds in two directions.

# CDX-10 Applications



## CDX-10 HIGH SECURITY LOCK - PEDESTRIAN DOOR DEADBOLTS

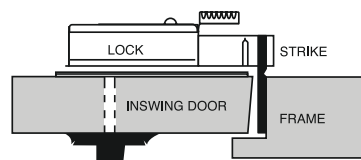
The Kaba Mas CDX-10 consists of an X-10 high security style 1 lock, Federal Specification FF-L-2740B, mounted on a deadbolt base plate. The base plate is surface-mounted to the inside face of the door. The deadbolt base plate has two essential features:

**First**, it provides a means of latching the bolt in the retracted position. This prevents the bolt from being inadvertently extended.

**Second**, turning the knob on the base plate will retract the bolt to allow egress.

The CDX-10 is manufactured per Federal Specification FF-L-2890A.

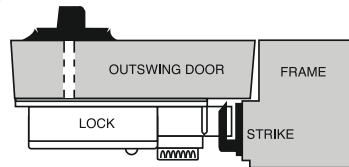
## Strikes



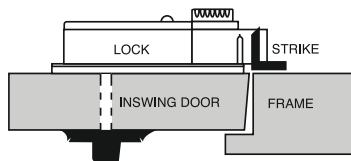
Type 1



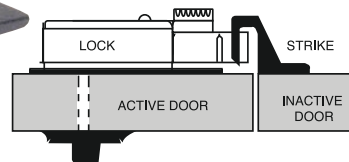
For a complete list of CDX-10 options, part numbers and accessories, please refer to our List Price Book



Type 2



Type 3



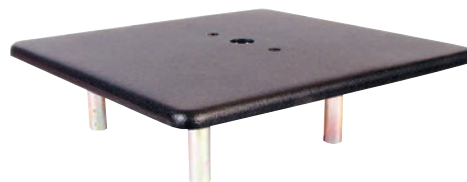
Type 9



## Dial Ring Mounting Plates



Drill Resistant: Class D



Non Drill-Resistant: Class N





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The Kaba Safe Lock Division relies on product innovation to meet our markets' ever-changing needs for loss prevention and access control solutions.

The Kaba and LA GARD brands are synonymous worldwide with security, control and accountability.

Kaba AG | Kaba Mas | Kaba Mauer GmbH

**Kaba Mas**

749 W Short Street

Lexington KY 40508

phone 859-253-4744

toll-free 877-KabaMas (522-2627)

fax 859-255-2655

[www.kaba-mas.com](http://www.kaba-mas.com)

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